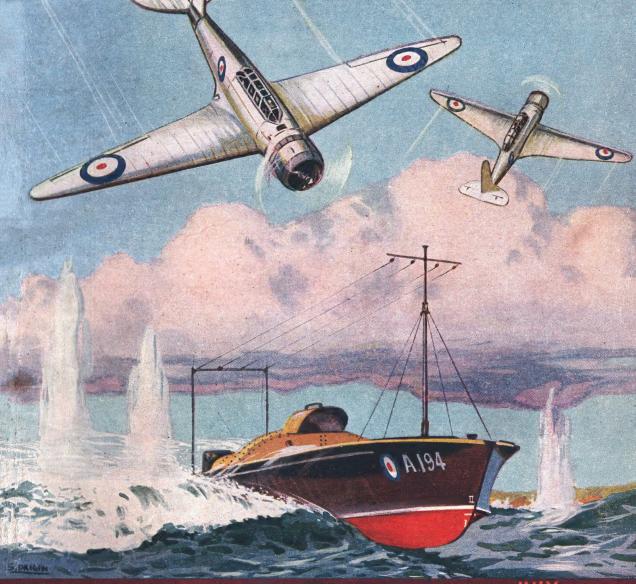
FIGHTER PILOT-By McSCOTCH of 40 Squadron, R.F.C.

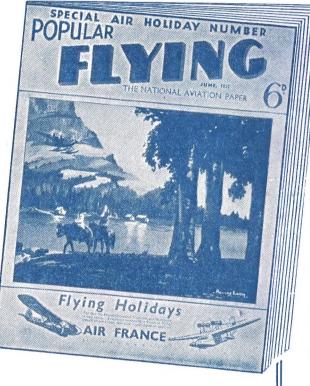






ANGEL OF DEATH
LONG COMPLETE AIR-WAR ADVENTURE BY G. M. BOWMAN
DOUBLE DECOY
BY MAJOR L.S. METFORD
BY EDWARD GREEN

SPECIAL AIR HOLIDAY NUMBER



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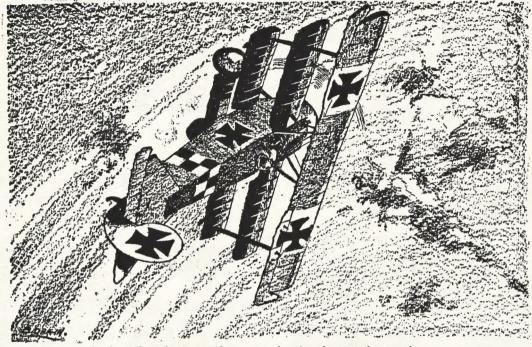
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JULY 1937.

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ANGEL OF DEATH



As the red triplane turned to come plunging down to the attack . . .

A Long Complete Mystery Thriller of the Air War on the Western Front

CHAPTER I

Disturber of the Peace

THE afternoon was clear, warm and sunny. It was the sort of afternoon that had a mezzotint quality of serene peace, on which the far horizon assumed the misty hue of a yellow tea-rose—on which the shrill green of spring buds demonstrated the eternal optimism of Nature, all along the blackened, shattered battle-line from Bethune to Ypres.

An afternoon for a lazy poet. An ideal afternoon for such a stolid, honest machine as an R.E.8, getting on with its lawful job of "Art Obs" and strictly minding its own business.

In the R.E.8, Lieutenant Edward Brownlow flew in concentric circles, watched carefully for powdery mushroom puffs of white smoke in the direction of Lille, and rattled the morse-key at the right-hand side of his "office." At a point somewhere behind Armentières, an H.E. battery, hidden beneath a camouflage of branches, altered its direction and trajectory according to those morse messages, which came through the earphones of a bored telegraphist, furtively pulling at a Woodbine in a state of lazy contentment.

In the opinion of everybody on both sides of that mad strip of insane and futile destruction, it was a nice, pleasant little war.

The batteries were registering well; their exploding shells were falling with nice efficiency on a patch of useless ground, carefully prepared to look important by a serious-minded party of German camouflage artists.

A New "Ace" had Turned Up from the Pack, a Black-Crossed Killer whose Mounting Victory List was Shrouded in Mystery until a Lone Fighter learnt the Secret which Nineteen other Men had known only in the Instant before they Died

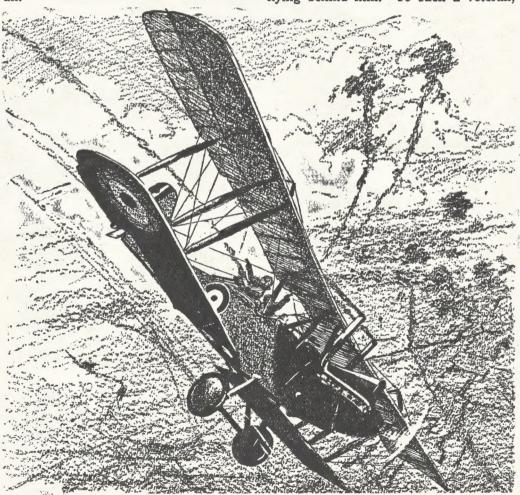
By G. M. BOWMAN

Nobody was being hurt—a good time was being had by all. The United States of America were paying for the entertainment, via loans and material supplies, the cost of which would be far beyond the purse of any country, even in the distant years when the war was practically forgotten. Which, of course, was just as it should be.

And then Johann went and spoiled it

In the R.E.8, Ted Brownlow neither saw nor heard Johann's meteor-like approach from the blue and peaceful vault of heaven. Those who held that young Mr. Brownlow could see out of his ears and smell German petrol a mile away, might be said to exaggerate.

The truth was that Lieutenant Edward Brownlow was an old-stager with nearly two years' experience of contact patrol flying behind him. To such a veteran,



. Verey lights sprayed out from the R.E.8 like stars from a Roman candle

even though he be but twenty-four, there actually comes some sixth sense which warns him of an enemy's approach. Possibly, Ted's ear might have caught some faint difference in the surrounding noise, caused by another exhaust than his own; it is for theorists to argue that a sun-glint reflected from the approaching Fokker's wings altered the light-volume across his own dashboard. It goes for nothing. The effect is all that matters.

And the effect, so far as Ted Brownlow's back-seat observer was concerned, mattered a great deal.

The R.E.8 slammed over into a vertical turn and then dropped away in a drunken sideslip as Ted acted on his veteran instincts. At the same instant, a stream of tracer bullets whistled by behind his observer's neck, just as that observer broke a camera-plate, sprawled wildly over his Scarff-mounting and wished he could hang on with his teeth. There was a sound like a passing explosion—and a red Fokker triplane flashed by earthwards. At its controls, Johann, the disturber of the peace, was saying unpleasant things in a mixture of Russian and Hebrew.

Johann pulled the triplane out of its headlong dive like a man pulling a sock out of a tar-bucket. He swept round in a wide turn, climbing hard and searching the upper sky for the "sitter" he had so narrowly missed. But the first things he saw were—fireworks.

It has been mentioned in passing that Lieutenant Edward Brownlow was an old-stager. And in this capacity he knew that a fight between an R.E.8 and a Fokker triplane would be on the same level as a contest between a middle-aged hen and a mountain hawk.

So Ted Brownlow drew his pistol. It was a Verey pistol, and out of it he proceeded to pump as many spluttering and flaring signal lights as he could load into the breech, at the same time high-tailing for home in no uncertain manner.

His observer helped industriously with two more pistols of the same kind. Verey lights sprayed out from the R.E.8 like stars from a Roman candle. And at the same time Lieutenant Brownlow caused the R.E.8 to perform every known evolution but that of climbing up its own exhaust pipe and thus disappearing in a cloud of smoke.

In the triplane, Leutnant Johann Krantz swore in German, which showed that his momentary flare of temper had died down. He went after the R.E.8, a hawk to the last, but began to perform antics of his own in order to avoid those blazing, spitting Vereys. Then things began to happen. Violent concussions and blossoms of white smoke came unpleasantly close, and what with Verey lights, A.A. shells, and a ceaseless hail of machinegun bullets from the R.E.8 observer, the pace became altogether too hot.

Johann fled, as Mr. Brownlow knew he would. Whilst giving his pyrotechnic display—an old and much valued trick in the circumstances—Ted had cleverly got down within his own A.A. range, and was now placidly making for home and tea with a cheerful grin upon his pleasant young face. There were a lot of people who said that "Art Obs" was just the thing for those who were tired of life, but the veteran Ted had given many a Brock's benefit before this, and scared off a raiding Hun every time.

Johann Krantz liked to make his kill quickly, from behind, and in decent He objected to friends and privacy. relations being signalled to attend the funeral. So now he turned his triplane away and sought higher altitudes in which neither A.A. gunners nor vengeful British scout patrols were likely to reach him. He turned north-by-east towards the home of his ancestors. And with the departing drone of both machines, the war once again settled down to a state of dreamy peacefulness, in which only an occasional bursting shell, the dull thud of a "flying pig," or the scream of a wounded man, made an angelus to the passing of a golden day.

CHAPTER II A Boy Called Krakoff

JOHANN'S ancestors are worth a mention; although their names were not

ANGEL OF DEATH

to be found upon the illustrious pages of the Almanach de Gotha. They were not even to be found in Johann's own memory. The only evidence of their existence was Johann himself.

Some who have gone astray from the beaten path in Northern Europe may know the little village of Plev, although it is doubtful, since Plev lies in that uncertain area where Russian, Pole, and Teuton form the basis of a population heavily spiced with Hebrew and coloured with a tincture of Mongol and Tartar.

Twenty-five years before Mr. Ted Brownlow's firework display on the Western Front, thawing icicles hung from the village church tower, and a blustering uncertainty about the grey winds from the northern steppes heralded the coming of spring to Plev. It was then that Johann had been born, amidst the straw of a cow-byre in the shadow of the church. His mother was a Jewess of Polish extraction, and therefore, to the people of Plev, a natural outcast amongst all God-fearing people.

And the bleak tolling of the church Mass bell marked her exit from the world, even as it beat a cynical welcome to the arrival of her son.

The son lived—lived, kicking and wailing amongst the straw, until a stolid cowman entered and crossed himself in pious amazement, before taking up the child and carrying it to his hovel.

The boy was called Krakoff after his foster parents, and Jurgis after the local overlord, who owned Plev and every soul within it. He was treated kindly—that is, he shared all there was to share with his foster parents in a land where meat was seen in the cottages once a year, on the feast of the Little Father, and where those who ate black bread every day, or with any kind of regularity, were accounted rich.

At fourteen, Jurgis Krakoff showed signs of undeniable good looks, combined with a physique that was miraculously healthy for one reared on so sparse a diet. His narrow head hinted at a Slav grandfather. The Hebrew strain showed in his eyes, his sensitive nose and black hair. But who could say what blood in his unknown father's make-up gave young Krakoff his full, sensuous mouth with all its curving cruelty?

When Jurgis was fourteen the racial troubles, that were never quite extinguished, flared up again in those borderlands. There were bearded Cossack riders who swept into the town one night under the excuse of a religious purge against the hated Jews and who killed and pillaged, regardless of any nationality at all.

In the glow of the blazing church, where yelling riders and screaming victims formed one of the endless tragic pictures of Russo-Hebrew history, young Jurgis plunged beneath a Cossack horse and neatly slit its windpipe. Blood soaked him as both animal and rider came down in a whirling crash. Jurgis very nearly removed the stunned rider's head in the next moment, and made for the shadows with the man's rifle and small-sword clutched to his breast.

It was then that the blazing churchtower fell, crashing down the hillside with the great bell flying from its beam and bouncing over and over down into the depths, adding a strange hideousness to the uproar with the clamour of its iron tongue.

JURGIS reached the small, solid German town of Thalenburg a month later. He was nearly starving, but he was better dressed than he had ever been in his life before, by reason of the sudden death of an opulent farmer who had fallen to his stolen rifle many leagues back over the bleak, deserted countryside. Before reaching Thalenburg Jurgis threw away his rifle, and destiny brought him employment at a stable in the town, where he washed the carriages of the great.

Rested, and with a few marks in his pocket, Jurgis left and went south a week or so later, for he knew there might be danger for him in the death of that farmer, who had expired from a shot in the back. But it was in Bolden that he made his first real step forward. For it was there, as a stable-washer, that he

laid eyes on the first motor-car he had seen or even heard of.

1912 saw Jurgis Krakoff in Berlin, saw him a young exquisite, before whom his long-forgotten foster parents would have knelt in the snow and bared their heads. For the legacy of his unknown mother—the Jewish quickness of mind, and acumen in all things monetary—had been Jurgis's greatest asset. This, added to the strain of Slav ruthlessness and his sure knowledge of how to keep body and soul together on practically nothing in the way of food, was the Jurgis Krakoff of 1912:

But this name had now been superseded by that of Johann Krantz-as firmly and respectably German as a name could be. Jurgis the starving, murderous waif of the northern steppes was dead. In his place stood Johann; the Johann who had learnt how to mix with moneyed people and sell them expensive motor-cars; who now made a monthly income which would have fed the entire population of Plev for a year; who was dressed by the best tailors, and could be seen almost every day demonstrating the advantages of a shining Austro-Daimler to a prospective purchaser among the fashionable crowds of the Unter den Linden.

In the spring of 1914, however, the reborn Johann Krantz found himself in difficulties. He had learnt how to spend money, but even his Jewish instincts could not save him from the youthful mistake of gambling. Meanwhile, the big car manufacturers were beginning to give the cream of their business to those who could open large shops and take over official agencies.

It was then, also, that the death of a certain serving-maid in a suburban Biergarten caused him to make a show of sadness among his friends. No one at the Biergarten could understand her suicide in the Wannensee lake. She had been such a bright, happy girl—and she had saved. To more than one acquaintance she had confided the fact that 800 marks were securely put by.

It was curious that a well-filled woollen

stocking, marked with the girl's initials, should have been in Johann's pleasant flat on the Berchtenstrasse after the tragedy. But Johann wished for no scandal, and tactfully avoided mentioning the stocking to the police, or anyone else.

Nevertheless, he felt a trifle anxious. One never knew with the police . . . the thing could be very worrying indeed when he thought about it.

Then, a glorious relief, a dispensation from Heaven, came the War.

CHAPTER III Brownlow Gets the D.T.'s

THERE may be those who see not the slightest connection between Lieutenant Ted Brownlow's firework display on the Western Front and the clamorous, brazen tolling of a church bell, ten years earlier, amidst the blazing murder of a Cossack raid. Ted Brownlow wouldn't have seen it, but then he was only fourteen at the time, and had just entered a Midland public school as English as the Albert Memorial.

The connection was in the psychology of Johann Krantz, whose only real emotion in ten years had been an inexplicable horror of any kind of fire, or the ringing of bells.

Ted brought the R.E.8 down low over the home back areas and sought his aerodrome in a cheerful if not derisive frame of mind. He had scented the approach of yet another Hun scout.

He had said "Boo" in that Hun's ear very loudly, and the Hun had turned tail and fled.

The Hun in question landed at the same moment as Ted, but on an aerodrome thirty miles away, and heaved himself out of his machine, nodding to running mechanics.

"The gracious Herr Leutnant has prevailed again?" asked the leader excitedly. "He has gained another victory?"

Johann shook his head.

"An observation machine driven down in enemy territory," he replied. "Not a

victory to be claimed officially. The score is still sixteen."

The leading mechanic shrugged his shoulders, but his eyes lost none of their admiration.

"Sixteen, and in less than a fortnight!" he muttered to his subordinates as they trundled the triplane towards the hangars, whilst Johann walked away. "Ach, but there goes a fighter! There goes one who may rival even the Freiherr von Richthofen if he keeps up this pace. And his fairness—his modesty! He will claim no victory that is not complete. But with the great, it is always so."

Johann, the modest hero, entered the Jagdstaffel office to make his report.

THIRTY miles away, Lieutenant Ted Brownlow was also modestly occupied in retailing the events of the afternoon, speaking somewhat thickly as he lit a cigarette.

His squadron-leader grinned and leaned back in a creaking armchair,

playing with a pencil.

"Well, my little Guy Fawkes," he said cheerfully, "I'm glad your songand-dance was appreciated, because it was positively your last public appearance—at this theatre, anyhow!"

Ted Brownlow stared.

"You've been drinking!" he said, rudely disregarding several pages of King's Regulations for conduct in the presence of a superior officer.

The squadron-leader bent forward and

took up a bundle of papers.

"The Vicar was here this morning," he said quietly. "Apparently they want more scout pilots—and want 'em badly. There's been a hitch in the supply of raw material from the flying schools in England. Trouble about some kind of new single-seater that's been spinning dozens of the poor kids to earth, during training, every week. So I was asked to nominate the best men I had for the job."

Ted said something impolite about Brigadier-General Charles Evelyn Vickery, whom he well knew as organising director of personnel over this large area of the Western Front. "You must have been drinking!" he finished. "Why me? I've never liked scouts. I've always liked to have a conductor to ring the bell and collect the fares on my little 'bus. Besides, I've never done anybody any harm—"

"You're for scouts," said his superior with an air of finality. "Sorry, Ted, but you're a couple of hundred hours ahead of anyone else here, and even your own observer has always admitted that you usually spot an approaching Hun quicker than he does. So it's your own fault, my son. And anyhow, our Reverend Brass Hat told me something that'll liven you Sixteen of our best chaps in the scout trade have been knocked off in the last fortnight. In a fortnight, mind you ! All of them thoroughly experienced men with nice little scores to their own credit. Seems a new German ace has turned up out of the pack, although nobody yet knows who he is. Anyhow, the dear Vicar wants his head on a charger. And you're to be one of the dancing girls."

"I don't dance," answered Ted rather crossly, but there was a gleam of interest in his eyes. "Do you mean to tell me that no one yet knows who this Hun

is ? "

"Not a soul. He's a complete dark horse, but he's damn well got to be found and finished off. Anyway, Ted, here's your orders—and you can either like 'em or lump 'em. The Detail Tactics Flight has already been formed——'

"The which?" gasped Ted.

"The Detail Tactics, my little seekerafter-knowledge. You know the good
old Army way of finding high-fahutin'
names for everything. The tactical
details you're going to be on concern the
finding of that mysterious German ace
and the placing, with all due skill and
agility, of a flea in his Teutonic ear. Now
buzz off, for Heaven's sake. I'm busy
on work of national importance. And
you'll find your merry men all lined up
and waiting for you to buy 'em drinks
in the anteroom. Here's the list."

Brownlow sighed and took the slip of paper which the other handed to him.

"It's a bit 'ard," he grumbled, glancing out of the office. "I'm a

simple-minded, peaceable creature—I don't want to go looking for dangerous and mysterious Huns. Moreover, if it comes to finding needles in haystacks, I don't like the smell of hay. My asthma

All of which remarks were typical of Lieutenant Edward Brownlow. His next remark was even more typical. Outside the squadron office, a youthful second-lieutenant just avoided collision, then turned to hold out a hand.

"Congrats, Brownlow," he said.
"I've just heard that you've been given your flight. Which is it?"

Ted shook his head wearily.

"All I've got is the D.T.'s!" he said in a sepulchral voice. And departed for the anteroom in the manner of a broken man.

CHAPTER IV Start of a Man Hunt

WHEREAS the high officials of the Army had a trick of finding ponderous titles for any unit—and might have been, in Mr. Gladstone's immortal words, "Overcome by the exuberance of their own verbosity"—the Army personnel was distinctly different. The aerodrome personnel, in this case, immediately rechristened the Detail Tactics flight with Ted Brownlow's brief and irreverent title.

The "D.T.'s" became famous from the first, and it was not long before they became famous all along the line, for each member of that flight of six was a crack pilot with a long "score" to his credit. And the authorities, for once, had been wise in putting a cool-headed, well-balanced veteran officer at their head.

They held their first meeting in the anteroom that same morning. Ted knew some of them by sight, and all by reputation. The one who most interested him was young "Sandy" Macrae from a Camel squadron, who had just been cited for the V.C. Ted went straight up to him and offered his hand.

"Congratulations on the bit of ribbon,"

he said quietly. "You ought to be boss of this crazy little show, Sandy."

But the fresh-faced, reckless-eyed

young Scot shook his head.

"Not a chance," he said. "I'm no stage manager—got no brains. Still, I'm delighted to come in and have my pop at the coconut-shy, if you get my meaning."

"Thanks," said Ted with equal quietness, and turned smiling to the other five men—Tamlyn, from Macrae's own squadron; Harlow, a real artist at the joystick, who had been a test pilot before coming to France; Hawkesley from Five; and Brand and Wakefield from a crack Camel squadron down on the Somme.

"Well, gentlemen," said Ted, "I think you all know what we're here for? We're looking for a mysterious Hun body-snatcher, and I don't think we'll do much good aerobatting about in nice, quiet flight-formation in search of him. So, to begin with, I propose that we spread out. We'll take all sections of the line within range. I'll work out each of your beats for you."

He waved a paper slip in his hand.

"Each man," he said, "will act in a polite and gentlemanly manner. He will take no part in any nasty rough-housing that may be going on. He will merely watch. And he will especially mark the machine of any Hun who seems to be above the average in flying and fighting. We'll have a round-table conference and consider reports when we all get back."

He tapped and lit a cigarette.

"And when we think we've spotted our man," he finished, "we'll start going out in formation to look for him. When we find him, one of us will drop down and take the beggar on. The rest will merely circle round to see that there's fair play. Is that agreed?"

Agreement being obvious—and noisy—the meeting adjourned for lunch.

JUST after 2 p.m. that afternoon, the seven "D.T.'s" in seven B.R.2 Camels took-off from the aerodrome together and spread out in seven different directions.

It was a misty afternoon, and for Ted it was uneventful. He had taken the most northern of the beats he had worked out and flew at about 4,000 feet over the shattered sepulchres of Ypres, and the lakes of the Zillibeke and Zonnebeke that were like grey eyes glazed in death. He ranged over Dixmude and swung round almost over Courtrai, but apart from one or two of his old "Art Obs" comrades and a few impudent photographers in D.H.'s, he saw nothing.

Once, far away to the south, he did spot a roving German scout, which looked no bigger than a flying tittlebat as its fuselage glittered in the vast greyblue bowl of the sky. But almost at once it disappeared in the haze. Ted did not seriously think of trying to catch it. The business of getting used to his new Camel was interesting and exhilarating. He aerobatted about like a playful porpoise, decided that Camels were agile and useful things, and had quite a pleasant time.

Which, all things considered, was a pity. For at the controls of that distant German tittlebat sat Johann Krantz. And Johann, who had swelled with praise from his jagdstaffel-commander over lunch, was out to add a seventeenth notch to the tally of his score.

CHAPTER V The Gun that Jambed

JOHANN had very well formed ideas on the subject of publicity. In his earlier days he had shunned it, for publicity would have meant the close attention of the police. But as his fortunes improved—and his name changed—he realised what a valuable thing publicity could be.

Now, the publicity which would attend his return from a fresh victory, immediately after praise from his leader, might go far to gain him promotion, if not a decoration.

He was cheerful, therefore, and confident—very, very confident—when, from a height of about 12,000 feet, he spotted a British Camel about twenty miles south of Lille. The Camel was not quite at the same height, but it started

climbing immediately he approached, which was not surprising, since it was piloted by the keen-eyed young Sandy Macrae, V.C., who was more than willing to live up to a reputation.

The battle began at about 9,000 feet, both machines plunging at each other head-on, with guns spluttering, even before they came within range. Johann swerved away first and showed a spatter of bullet-rips down one side of his fuselage, which gave first blood to Sandy. Even as he swerved, however, he turned the movement into a flicking half-roll and then dived down like a plummet in the instant before the careering Sandy could get round.

Johann was flying well, with much dash and all the vicious fighting spirit of one who is a born warrior.

Yet, as he came up in a screeching loop, and let loose a flying burst which missed Sandy's tail by a yard, Johann was not really fighting at all!

He was manœuvring. He was following a course of action which he had followed on sixteen previous occasions. He was gambling, as he invariably gambled, on a certainty. And he knew perfectly well that, if it came to a straight fight, this dodging, plunging Englishman had twenty times his own skill and could finish him off without any great effort.

Nevertheless, the fight seemed straight enough, both from the distant ground and so far as Sandy Macrae was concerned. Sandy slid away in a sideslip, checked it brilliantly, and then had the turning Johann well in his sights.

The move took Johann by surprise. Once again his fuselage suffered. The shrill shriek of bullets sounded just behind him, and he ducked, gasping.

He had come to hate a shrieking sound of any kind. He had once heard a drowning girl's shrieks echo across the dark Wannensee lake. A nice girl, fat and happy. In some ways it had been a pity. . . .

But Johann set his teeth as a bullet clanged on a steel cross-bar with a sound like a bell. Bells also gave him the shivers . . . they were unlucky . . .

Even so, he moved like a cat and was

streaking round in a tight turn before that bullet-burst hit anything vital.

Behind him Sandy Macrae could have cheered. Sandy allowed that this Hun was certainly a fighter, but he had made the most dangerous false move in the game. If another machine was on your tail, the best way of committing suicide was to go into a turn, that is, unless your circle of turning was very much less than the enemy's. And Sandy knew that the turning circle of a Fokker triplane and a Camel was practically the same.

So now he was sitting pretty. Whatever move his enemy made would still give Sandy a dead shot at close range. If he dived down, or climbed up, or straightened out, he would still plant himself exactly in Macrae's sights. He was cold meat—his one faint hope would be to go on circling round and round and round, in the wild hope that Sandy's petrol supply would give out before his own.

Yet, strangely enough, Johann had plunged into that suicide-turn purposely for reasons of his own, reasons which sixteen dead men might have explained, had they been able to speak!

AS long as he kept in that steep turn, Johann was safe. The danger lay in coming out of it. So he kept on turning. He did not once look back. But, from the moment of starting the first circle, he reached forward and began to beat on the firing handles of his Spandau guns.

He fired one or two shots. Then he began beating on the handles again. He actually pulled one glove off with his teeth and let it whirl away overboard as he reached forward again and fiddled with the feed-block.

Behind him, Sandy Macrae saw that motion and opened his eyes wide behind the goggle-lenses.

"Poor beggar!" breathed Sandy to himself. "Jambed—he's got a bent link stuck in there, or something—"

He watched Johann carefully and kept after him, holding the turn tight. But when the struggling, fiddling Johann seemed to lose control and make the turn a shade wider, Sandy did not fire a shot. He was straining up in his place, looking above his own guns at the enemy pilot wrenching frantically at his apparently jambed weapon.

And not for an instant did he notice that in front of Johann there was an ordinary motor-car driving mirror on a swivel arm, in which Johann could see exactly what was taking place behind him.

Among the scout pilots of the various air services, there was a very strong and a very real sporting spirit. To shoot down a man who was working on a jambed gun was such a cold-blooded business that it was regarded as little short of murder. Sandy Macrae couldn't do it, and it is safe to say that no other English scout pilot in the same circumstances would have done it.

And Johann had made a practice of always putting himself in a position where his sporting enemy could see, in good time, what was wrong.

Johann watched his driving mirror with a thin-lipped smile as he still fiddled and fumbled with the gun feedblock. He let his machine slide as though it was half out of control, and made the turn slacker and slacker.

Then, still bending forward, he wrenched the stick back into his stomach with a sharp jerk, and elbowed the engine control all out, giving it full bore!

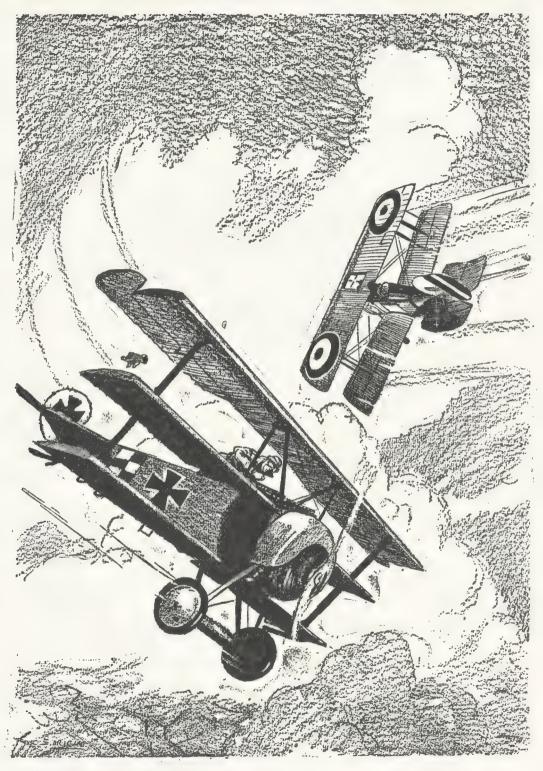
The result was that his machine swept inwards with breath-taking unexpectedness, and shuddered round in a tighter turn than any Camel could make.

The sporting Sandy Macrae was taken clean by surprise. He did not suspect treachery, even as the Fokker howled away from him, but he slammed over to follow, having lost position badly.

Naturally, he had no idea that Johann's machine was specially rigged for tight turning, at the full expense of every other control. But he did know, an instant later, that he had allowed himself to fall into exactly the same dangerous position as his enemy had been occupying before the gun-jamb!

Johann's move had swept him clean

ANGEL OF DEATH



He fired one or two shots. Then, reaching forward, he began to beat on the firing handles of his Spandau guns

across the wide circle, so that he could turn again sharply. Now, he was coming round after Macrae, instead of being pursued himself.

But he was still bending forward, jerking and working fiercely at his gun.

Sandy Macrae drew a sharp breath and swerved away out of the turn, thanking Heaven that his enemy's gun was jambed, so that there was no danger.

But in that moment young Sandy

Macrae, V.C., died !

With a jerk, Johann ceased fiddling with a gun which had never really jambed at all. He thumbed both his controls viciously as the Camel swung out of the circle, dead in front of his sights, at less than a hundred and fifty yards' range.

And, for the seventeenth time, the shattered body of an English pilot spun and cartwheeled down the sky, to crash in a last landing and to carry to the grave the secret of a bitter treachery, which would certainly have resulted in the murderer standing before a firing party of his own comrades-in-arms, had it ever become known.

Johann smiled cheerfully, thrust one hand deep into the pocket of his leather jacket, and flew off home to tea.

CHAPTER VI Angel of Death

THAT evening was a black one for Ted Brownlow, and indeed for the whole of the R.F.C. in the field.

Young Macrae gone, shot down in a dimly-observed fight against a single enemy, which had taken place far above the low ground haze. There had been no identifying the machine which had won that grim victory.

Was it the mysterious Ace?

In the morning came news, via the highly efficient British Intelligent Service. It was news which made Ted Brownlow frown blackly, and puzzle mightily, for Sandy had been one of the finest single-seater fighting pilots of the whole Corps.

Johann's publicity idea had worked.

"Officially reported in German squadron orders," ran the message, "Leutnant

Johann Krantz, Fiftieth Jagdstaffel, claimed shot down Lieutenant Laird Macrae, V.C. Action observed and claim allowed. Identification Macrae by Imperial Intelligence Service, according squadron number on machine. Krantz promoted Oberleutnant and awarded Cross, second class."

"Damn!" said Ted Brownlow very quietly, but very angrily. "It was just like Sandy. I told him not to scrap, but I suppose he couldn't keep out of it. By golly, we'll damned soon find this Krantz—"

Had he but known it, Ted Brownlow had uttered a prophecy. At the moment, however, he merely went hot-foot to the orderly office, to ask that a special request be sent through to Intelligence.

"Tell them we want to know the type of machine this Krantz flies, squadron number and all the rest of it, and especially if he's one of those cocky Huns who carry a distinguishing mark of any kind," he snapped. "And tell 'em to wake their ideas up and get to work quickly!"

He then returned to the D.T.'s flight and once again led them out on their search.

As he climbed into his machine, Ted Brownlow was in far too grim and pre-occupied a mood to notice anything unusual. He did not notice that his engine cowling had been painted white by one of the riggers. And he did not know that this had been done expressly on the order of a certain Staff Major who, from a comfortable office at Wing Headquarters, directed official relations with the Home Press.

The Staff Major was a hard-working man of his type, and had once occupied a well-paid post in Fleet Street connected with advertising. It was his delicate job to pass information intended for the hungry papers at home, and, in some circumstances, to issue carefully censored news and photographs designed to have a cheering effect on the home population.

Successful "aces" in the Flying Corps always made good news and good reading. Moreover, that kind of news was welcomed in the line itself by the authorities. When the four- or five-dayold newspapers came along to the troops, it was counted good for morale that men should read of the exploits of their own special heroes.

And Ted Brownlow, as leader of the already famous "D.T.'s" Flight, had unconsciously become news already, although the actual object of the Flight was naturally suppressed.

Ted spent a second uneventful afternoon. And he had a second bad evening, for this time it was young Brand who failed to return.

Next morning's Intelligence accredited the victory again to Oberleutnant Krantz, and Ted Brownlow gritted his teeth. As before, it had been a lonely fight, well over German territory; not, in fact, observed from the British side at all. And the requested report from British Intelligence, which arrived at the aerodrome just after lunch, did little to lighten the gloom.

Krantz, it was stated, refused to carry any distinguishing mark on his machine at all. Nor did he fly any one type of machine constantly. He alternated between a Fokker D.7, a Triplane, and a Pfalz.

Ted did not know it, but Oberleutnant Johann Krantz had suddenly realised that there was danger, as well as advantage, in publicity, and he was growing careful. Had he been a Richthofen or a Udet, had he been a champion fighter glorying in his own powers and glad to carry any kind of challenging distinguishing mark, it would have been different. As it was, he merely had a plan. It was a plan which had succeeded eighteen times! No victim who had seen it work had lived to tell the tale. That was the strong point about it.

Johann was fully determined that if any enemy did escape, by mischance, to tell the tale, he himself would immediately apply for the command of a training squadron, and thus get himself out of the war. With his reputation as high as it was, such a request would be granted forthwith.

But, meanwhile, with the peculiar greedy ambition so typical of his kind,

he dreamed of building up a score as great as the mighty Baron von Richthofen's.

Like most men on the German side at that time, he firmly believed that victory was only a matter of months, or a year at the most. And what a prospect, to return to victorious Berlin, when the war was over, a greater figure even than the Herr Baron! He might even get a title. Certainly, undreamt of avenues of business would be open to him. Money would fall into his lap. Even the police would be his fawning friends.

Had Ted Brownlow, who liked history, been asked whether it was ambition or greedy stupidity that brought about the downfall of Napoleon, he would have plumped for the latter. Ted had the average Englishman's Heaven-sent knowledge that ambition is like fire, a magnificent servant but a mad, ravening, senseless master.

But no such thoughts occupied Ted Brownlow when, with the death of Hawkesley that morning like an ache in his mind, he met Johann.

THE meeting of the two was potent in many ways. And the most potent point about it was the result of German Intelligence activity.

Like everything else Teutonic, that body was highly efficient. Extracts from English newspapers which might be of use to any commander in the field were always on that commander's desk the morning after publication.

Oberleutnant Johann Krantz, therefore, had already seen the front page of an illustrated London daily, which carried a photograph of Ted Brownlow climbing up into the cockpit of a white-cowled Camel.

"A WHITE ANGEL OF DEATH THAT STRIKES TERROR IN GERMAN HEARTS," ran the headlines. "Lieutenant Edward Brownlow, leader of a famous scouting force, is known and feared by every German airman. Wherever his white-nosed machine appears, leading his dashing followers over the lines, no German squadron will remain to give battle."

There was a lot more. The brief

details originally issued by the Staff Major had been cleverly embroidered and turned into a first-class dramatic story by the paper's grateful staff. Ted Brownlow, it may be said, had not the faintest idea that any such story had appeared, for the home papers were always three days old or more before they reached any of the line squadrons.

He was boring his way up through a heavy cloudbank at about 4,000 feet when he suddenly came in sight of Johann, as he shot with almost dazzling suddenness out of the dank mist into the bright sunlight. There was no time to read squadron numbers or obtain any such identification. Ted merely saw a German Fokker D.7, and went for it.

But Johann was badly startled, for the first thing he noticed was that white engine-cowling which he had read about only that morning.

CHAPTER VII When Ace Meets Ace

OHANN did not welcome this fight at all. In the first place, in spite of his recent triumph and the two "victories" which had followed it, he was not feeling quite himself. The previous evening his official Iron Cross citation had come through, and the Jagdstaffel had celebrated in his honour. Some of the brighter spirits, however, had gone across to the local church which, by the freakishness of war, still had a tower intact. And they had rung the bell incessantly for more than an hour. The more Johann protested, the more his boisterous, delighted comrades refused to stop the clangour.

So Johann had drunk a very great deal indeed. He was not used to drink. Successful people of Johann's kind know full well the loquacious dangers of alcohol and avoid it by instinct. The result, therefore, was deplorable so far as Johann's digestive efficiency was concerned. But, prior to that regrettable lapse, which delighted his stronger-stomached brother-officers, the wine fumes made him unwontedly sentimental. Someone at the piano played "Am der

Wannensee," a popular German musical comedy tune of the time. And Johann wept.

In slobbering gutturals he actually started telling an equally drunken crony about a laughing and happy *Liebling*, whose cheeks were as round and red as an apple, and who had saved a stockingful of good golden marks.

It was probably only that sudden inner upheaval that saved Johann from the indiscretion of his life. But, when he was finally in bed, his bilious sleep was interrupted by a positively appalling nightmare, in which a girl with green weeds streaking her dead face was coming swiftly after him out of a black lake, and he, with a weighted stocking tangled like a snake about his feet, was trying help-lessly to run. . . .

It had been a shock to Johann. The ghastly danger of an alcohol-loosened tongue had shadowed his morning. After the take-off he had felt a shade better. The sharp, ferociously cold air had brought back the ghost of an appetite. He determined, however, to attempt no victory that day.

And now, here in the heights where he had thought himself safe from worry, he was suddenly up against trouble of a kind that he was far too terrified and unsteady to face.

The white cowling of the Angel of Death! The English Ace whose praises he had read in an English newspaper that very day!

JOHANN actually tried not to give battle at all. He slammed up and over in a half roll; he dived like a frightened trout down into the grey depths of the clouds. But, even as he went, he heard the vicious hiss of machine-gun bullets streaking only a foot or so away from his head.

And when his Fokker dropped out into the grey day below the cloudbanks, those bullets hissed again.

Ted Brownlow wanted a victim. He had not the faintest idea that he was up against the mysterious German killer, or he would have fought like a madman. As it was, he merely wanted a Hun, if

only to make him feel a little better after the passing of Macrae, Brand and Hawkesley.

And Ted Brownlow was now a first-class fighting pilot. He put a bullet-burst through Johann's fuselage at a diagonal angle which smashed a couple of the cockpit dials and chipped a lump out of the control stick. Johann wriggled like a fish on a hook. He was out of sorts, and assailed by a blind terror of this English champion. Once again he tried to dive and run. He wanted to get away. He didn't even want to try his fake gunjamb. He knew he was in no condition to manœuvre carefully . . . and he was frightened . . .

But Ted stuck like a leech. He anticipated Johann's dodge and plunged wide, to come back in a screaming turn and intercept it. Johann was trapped and could only swerve away, swerve into a closely followed turn which, in the ordinary way, was just what he manceuvred for.

He found himself forced to work his plan, willy-nilly.

In a panic, he flung off one glove and started working on a "jambed" gun. He did so in terror, to save his own life. But, in doing so, he made a bad mistake.

For, from the start of the fight, he had not fired a single shot! And for a man to start clearing a jamb in a gun which had not been used was queer indeed.

Yet Ted Brownlow held his hand. He saw his enemy's helpless position and, like any other pilot, he could not bring himself to shoot an unarmed man in the back. Nevertheless, he hung tightly to Johann's tail, if anything still more furious because the sudden gun-trouble had held up the fight.

Johann was now almost standing up over his pretended work. He had slackened the Fokker out of the turn, but the angry Ted was so close behind that it was impossible to bring off that treacherous, death-dealing manœuvre. It was a manœuvre which must not be tried if there was the slightest danger of its failing.

Johann put his nose down and dived for home. He dived, engine-on, at an appalling angle, but even so he did not feel safe until he was under cover of his own anti-aircraft guns, which began to plaster the pursuing Ted with vigour.

To Johann's utter relief, Ted swerved away, climbed, and made for his own side of the lines. And it was only as he did so that the strangeness of that gun-jamb entered his angry mind.

Ted Brownlow arrived home, frowning and puzzled. He was calling himself a fool. It was all very well to let a man live, if he couldn't fight back, but the logical and sensible thing to do was to force him down on the home side of the lines. The idea had not come to Ted until it was too late.

Now he realised that he had missed a chance of interrogating a German officer who might be a close comrade of the Ace, Krantz. He had also missed the opportunity to find out just how a pilot knew his gun was jambed before he started to fire it!

BACK home, however, Ted Brownlow found out something else which momentarily drove these other considerations from his head.

On the aerodrome he was greeted by a couple of grinning comrades, who showed him a copy of that English newspaper which had already been the subject of German comment.

"How's the Little White Angel of Death?" asked Tomlyn, solicitously. "Any further statement to make to the Press? Come on now, don't be shy."

Harlow, his grinning companion, ceremoniously lifted his cap and bowed.

"The Archangel Gabriel, I presume?" he said. "I say, can I have your autograph? I've got a sister in the W.A.A.C.'s who'd simply love to have it——"

But it seemed that Mr. Edward Brownlow had lost his sense of humour. He stared at the newspaper with goggling eyes, gasped once or twice, then turned and in most unangelic terms, enquired the whereabouts of the rigger-sergeant. That worthy put in an appearance at the double, stood rigidly to attention and stared fixedly at Ted's left ear, while Ted enquired, in highly coloured language,

who had painted the cowling and who had sent this penny-dreadful story to Fleet Street.

After five minutes' conversation the sergeant began to perspire slightly, even though he was something of an artistic linguist himself. He could only answer one of those questions, and, to prevent murder or worse, he tactfully announced that the rigger-painter who had done the job was on leave.

"Well," finished Ted, drawing breath at last, "wash the damned stuff OFF! Do you hear me? Wash it off! And just in case I haven't made myself clear, if I see anyone else with a paint brush within fifty yards of my machine from now on, I'll ram my machine-gun down his neck! You may go to the devil!"

"Yes, sir," said the sergeant. "Very good, sir," and made haste to disappear.

Ted snorted and turned away. He was still fuming as he washed himself before entering the mess for lunch. There, he found that life still had its horrors, for young Wakefield, in an aggressively reverent voice, was starting a complicated argument with Harlow as to whether there was any special Flight amongst the angels for members of the R.F.C., and would there be any cushy jobs as instructors within the confines of the Pearly Gates.

CHAPTER VIII Error of Death

TED BROWNLOW went to bed late that night, but he slept badly. He was thinking. Up to now the ace-hunt had been a dismal failure. It had been a tragic business of losing splendid friends, of nerve-racking disappointments, of groping helplessly in the dark. The D.T.'s had certainly lived up to their name, but three of the best of them had died . . . to no purpose. . . .

There was one curious point about the whole business. Your true German is a stolid person in the ordinary way, but give him a little personal triumph, a little publicity, and he becomes a gladi-

ator. A chest-beater. A wearer of challenging badges such as skulls-and-crossbones, or flying coffins. He gathers a circus of followers. He reigns, a little Sultan, in his penny pomp, until a bullet brings that reign to a crashing end.

In short, the ordinary, successful German is a cheerful individual, with the virtues and faults of his race.

He is not a Johann, but then Johann could not rightfully call himself a German, any more than he could call himself a Russian, Pole, Jew, or anything else in particular.

Ted Brownlow was not as yet consciously aware of Johann's existence. All he knew was that a German ace was keeping himself strangely dark, and being strangely and horribly successful.

Ted finally sought sleep, puzzled by memories of a Fokker pilot who had worked on a jambed gun before he had fired a shot out of it.

"S'pose a cartridge must have burst in the breech with the very first link that went through," muttered Ted drowsily to himself. "It must have gummed up solid when he first pressed the lever. But he was never really dead enough on me to take a shot. . . . and I didn't hear him loose off at all . . ."

Ted drifted into sleep. And it seemed that less than five seconds later his batman was waking him with that well-known regulation cup of dark brown brew, tasting vaguely of petrol and sardines, which the Army, with its genius for names, calls tea.

Ted went out to watch the Flight take off directly he had stumbled into his things, for, since the passing of Hawkesley, he had changed routine. The remainder of the Flight, with the three new men who had filled the vacant places, were starting in formation according to his orders. He, alone, took the air by himself.

If the Flight found Krantz, the ace, they would all be there to watch for any tricks, whilst one of their number, drawn by lot, tried his skill against the mysterious champion.

But Ted wanted to play a single hand in this business. It had grown to be a personal matter, and he was anxious to settle the feud on his own account.

The appalling nerve strain of war, and especially war in the air, gave the most level-headed and well-balanced of men such impressions.

In Ted Brownlow's case, it happened to work out that way.

TOHANN, flying a Pfalz on this clear sunny morning with the dawn just fresh in the sky, saw the D.T.'s Flight from afar, and carefully turned away Caution was his watchword from it. now, more than ever after yesterday's But he was quite willing for fright. combat, a nice easy "combat" with an ordinary, unsuspecting young pilot of no unusual skill who would fall innocently into his trap. Apart from that, Johann was avoiding formations of any kind, and particularly any machine that looked as if it had a white cowl. Yesterday's encounter had shaken him badly.

But the direction he took as he turned away from the main flight led him directly towards Ted Brownlow, who was sitting at about eight thousand feet scanning the sky carefully. Ted saw Johann first. He saw a Pfalz, whereas his enemy of the day before had been in a Fokker.

But, on the side of the Pfalz as it came closer, he clearly made out a squadron number which made him start violently. It was the number reported by Intelligence to be that of Krantz's Jagdstaffel! So, even if this wasn't the ace himself, it was one of his friends.

Ted put the nose of his Camel down and went into a plunging, flashing attack with his heart beating distinctly faster. His engine-cowling was now the ordinary black. The "Angel of Death" sign was no more. Ted's orders had been carried out.

Johann, actually, was a good pilot, although in anything like a real fight he had been far too thoroughly frightened to use his natural skill. He saw that attack coming now, and met it cleverly.

For his enemy was in just an ordinary Camel, with an ordinary black enginecowling like any other. Johann grinned as he jerked his "driving" mirror up into place on its swivel-arm, and then coolly and carefully started manœuvring for his twentieth victory. But he realised, almost immediately, that he was up against more than a young and inexperienced tyro, although he had no idea that this was his most feared enemy.

He sideslipped cleverly and was well out of the way of the diving attack which Ted made out of a half-roll. Indeed, he managed to get a burst of ten through the tailplane of the Camel as it plunged overhead. Then he whirled and clipped inside Ted's turning-axis as the Camel came round on the proverbial sixpence.

To put himself in a good position for a fresh attack, Johann now had only to swerve away vertically to the left. A turn to the right would give the Camel that perfect check-mate mastery of close pursuit in a diminishing curve. Ted could not hope that any pilot would do such a suicidal thing.

Yet Johann did it! He hammered out a ten-burst which missed Ted by a couple of feet, just before he passed. Then he was in that deadly turn, with the amazed and delighted Ted screaming after him.

But Johann was still grinning as he suddenly bent forward and began beating and pushing at the lever of his right hand gun.

For the twentieth time, he was in the condemned place in the thunderous turn of death. But, for the twentieth time, he knew he was safe so long as he kept in it. His thin lips were still curved in a grin as he beat and hammered at the gun, keeping his eyes glued carefully on the mirror which reflected the pursuing enemy machine.

It was only a matter of minutes, now. Only a matter of playing out that grim little comedy, and letting the turns get slacker and slacker until the right moment came. Then for the swift jerk at controls, and the dart across that would reverse positions with his sporting and unsuspecting enemy.

Johann liked the idea of that round number, twenty. But, as he thought of it, a curious mental trick suddenly made him remember that Gretel had been just twenty when she died in the lonely black depths of the Wannensee. He almost cursed as he flung the thought away from him. He played up to his part for the twentieth time by dragging off a glove and letting it whirl away, so that he could work with a free hand.

Yet it was at that moment that Johann's heart first misgave him.

For Ted was sticking tighter than a leech, and on his face had appeared a strange expression.

THIS was just what had happened yesterday! This Pfalz pilot had made the deadly mistake of going into that suicidal turn exactly as the Fokker pilot had done the day before! This pilot was suddenly afflicted with a gunjamb exactly as his predecessor had been!

But, previous to the jamb, the gun had fired a clear, ordinary burst of ten. There had been no "one, two, three four—phut" which was the sign of an ordinary jamb.

In short, this was so much more than a coincidence that Ted Brownlow was suddenly, quiveringly tense, whilst his mind worked like lightning.

Johann Krantz had never read the works of the poet Burns, who said that "The best laid plans o' mice and men gang oft agley." So it never occurred to him that anyone other than himself might dislike publicity, although for very different reasons. The idea that a man, flying a distinguishing white cowling, might have had it re-painted its original colour, never entered his head. If it had, he would have shied away as from the plague. He feared a white engine-cowling—but this one was the regulation black.

"I'm not going to plug you in cold blood," said Ted Brownlow between his teeth, "but by golly you're not going home, my friend! You're coming with me over to my side of the wall, if you can't clear that gun. And I'm going to have a look at that gun, myself, at close quarters. Now then——"

Ted opened flat out until he was no more than ten feet from the wavering

Pfalz's tail. Johann saw the move in his mirror, and gulped. This was against all his previous experience. For one moment he thought that he had met some heartless scoundrel who would shoot down a helpless man. He was shaken by an almost childish rage. This was against all the rules—

Ted fired a burst. He had the Pfalz dead in his sights, and he purposely fired wide just to the right to attract the pilot's attention. He succeeded. In a moment of panic, Johann actually paused and looked round.

Ted raised an arm and waved it to indicate that his enemy must go down and make for the British side, otherwise . . .

It was just the irony of fate that one of those warning bullets clipped a metal-centred outer strut of the Pfalz with a bell-like clang. In that instant, a terrified boy came back to life, a boy who had run frantically through bloody streets during a Cossack massacre, a boy who plunged for safety wherever it offered, who gripped a knife and was ready to lash out with blind, unreasoning ferocity at anything in his way . . .

The roar and crackle of a blazing church tower was sounding in Johann's ears as he sent his machine plunging down and then wrenched the stick back and hurled off at a sharp angle. The movement took the closely-following Ted by surprise. For Johann's Pfalz was rigged for turning, just as his Fokker had been.

Ted overshot, put his machine clean up on one wing, and came screaming round again. He saw that his enemy was now practically on the other side of the circle. But he merely thought that this was a blind dash for escape. He still feared nothing from that jambed gun.

It was then that the terrified Johann made his greatest mistake.

He fired !

It was a blindly reckless burst, which Johann let fly as he kicked over into a half-roll in the wild hope of catching his enemy by the difference in angle. Indeed, the bullets missed Ted's tail by a mere foot or so. But they told him a secret

which nineteen other men had known only in the few seconds before they died!

"THAT gun wasn't jambed!" howled Ted, his eyes glaring. "It wasn't jambed! He hasn't fired a single clearing-shot! The belt hasn't moved! By golly, it was all a fake——"

Ted hauled clean up into a flick loop. He anticipated the result of Johann's roll, and thundered down recklessly, slamming hard on left rudder and risking the spin as he deflected. For a moment, the Pfalz was dead in his ring-bobbin. Ted was shouting in an almost blind fury as he thumbed his gun-controls and saw the tracers whip out, while the stinking cordite fumes drove back into his face.

The Pfalz was out of the sight-ring almost as soon as it had entered, but Ted knew that his burst had been accurate, even as he slammed over controls to check the spin. Then he came up again, ready to loop or roll as he sighted his enemy again.

"So that's it, is it?" panted Ted on an almost insane note. "You've worked that one before, my lad, I'll bet you worked it on Sandy Macrae! By Heaven, THAT'S how you did it! That explains the mystery! By Heaven, you swine—"

Johann pushed himself back from where he had collapsed over the Pfalz's stick, by pressing a hand mightily against the dashboard. His mouth was a streaming gash, his left shoulder was shattered, and three bullets had torn his left side. Some vague reflex action made him pull the machine on to a straight keel. It

seemed that only a wild animal tenacity kept him clinging to life. There was a dull crackling in his ears, and his throat was filled so that he choked like a man drowning.

His sight was dim with the dimness of black water. He was conscious only of some vague presence clawing and dragging at his left arm and side. And he was screaming without a sound, for he knew that that presence was a girl long dead who was dragging him down and down into the waters. . .

Ted was above, and behind. He fired a second burst of ten squarely into the back of the Pfalz cockpit. Then he thundered up and swerved away as the Pfalz slid down on to one wing, rolled over, and then spun drunkenly down with its engine still roaring.

Jurgis Krakoff was drooping hideously within his safety-belt, and his face was beating senselessly against the dashboard. He had lost all consciousness now except that of drowning, of dead hands pulling him farther and farther into the depths, of the faint, horrible sound of a bell falling from a gutted tower of flames, and bounding and clanging into a shadowed abyss. . . .

As the machine cartwheeled down at well over two hundred miles an hour, a bullet-severed stay swinging against a metal tube beneath the dash, rang with every turn.

On the ground, men scattered and ran for their lives as that whirling menace thundered down almost upon them.

Then came the final, battering crash of annihilation. . . .

"BLIND" LANDINGS IN R.A.F. BOMBERS

HEAVY bombers are likely to be the first aircraft in the Royal Air Force to carry "blind" landing apparatus for use when mist obscures the aerodrome from view. The necessary ground equipment is now being installed at a few Service stations, and experiments are being pressed on to determine which is the most efficient system yet available.

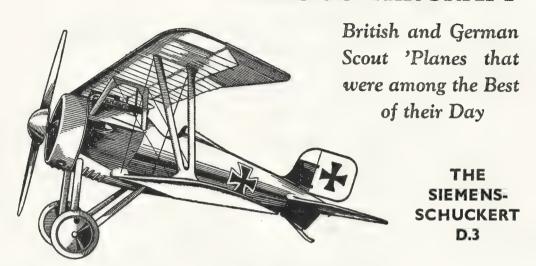
All British Service pilots are trained to fly "blind" and to navigate through clouds and fog. Many of the larger aircraft in the Force have automatic pilots which simplify accurate course-keeping when outward vision is bad. But up to the present no provision has been made for the final manœuvre of landing.

Apparatus that is now installed at several English and European civil aerodromes guides

incoming aircraft to the aerodrome and makes normal landings possible within the limiting "visibility" factor that aerodrome surfaces must be visible from a height of 50 feet. Only in the thickest fogs is this condition not met, and the apparatus undoubtedly helps enormously to maintain flying in weather that formerly obliged immediate cessation of all operations.

Broadly speaking, it begins to guide the aeroplane at a distance of about thirty miles from the aerodrome, warns the pilot when he passes over "marker" beacons located in a direct line, one about two miles away from and the other near the border of the aerodrome, and thereby enables him to steer a course along a descending flight path which brings the craft exactly into position for landing.

FAMOUS AIRCRAFT



THAT the German aircraft designers of 1918 were well ahead with their ideas is evident from the streamlined appearance of this Siemens-Schuckert scout with its up-to-date "V" type racing strut. Other notable features of the design were the balanced ailerons on both planes and the balanced rudder and elevators. Its stumpy fuselage made the D.3 a somewhat tricky machine to handle, but once its habits were known its extraordinary manœuvrability endeared it to experienced pilots

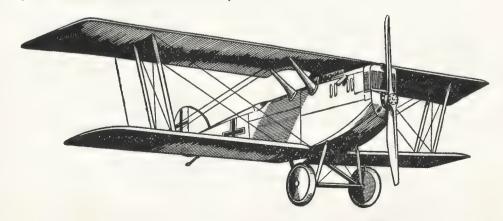
and made it a formidable fighting type.

Powered with a Siemens-Halske engine developing 160 h.p., the D.3 had a top speed of 151 m.p.h. Its chief dimensions were a span of 26 ft. 3 in.; a length of 18 ft. 9 in., and a height of 7 ft. 10 in. Its makers, the Siemens-Schuckert works, were also responsible for the construction of one of Germany's largest war-time bombers, the six-engined Siemens "Ruisenflugzeug," a species of super-Gotha.

THE DORNIER D.I

ON January 1st, 1918, at the Johannishal aerodrome at Berlin, the Imperial German Air Service held a great scout 'plane competition. No prizes were offered, but it was generally known that the most successful machine would be ordered in quantities and would become the standard equipment of every front-line fighting squadron. Every German aircraft factory of note was represented in the contest, which was won by the Fokker Model V.22, later to become famous as the Fokker D.7.

A close runner-up was the Dornier D.1, which, with a top speed of 138 m.p.h., was actually faster than the winning design. In other respects, however, it did not come up to expectations, though its sturdy construction won for it a small but useful order. Fitted with a 160 h.p. Mercedes engine, it had a span of 29 ft. II in., was $25\frac{1}{2}$ ft. long, and 10 ft. $5\frac{1}{2}$ in. high, and was armed with twin Spandaus.



OF THE GREAT WAR



THE MARTINSYDE ELEPHANT

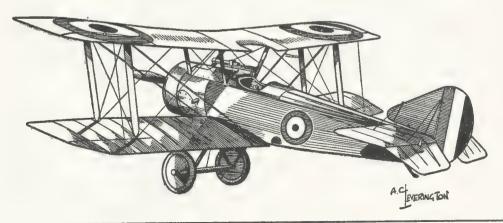
THE Martinsyde Elephant started life in 1915 as the Martinsyde Scout, fitted with a 120 h.p. Beardmore engine, and in this form was the original active-service equipment of No. 27 Squadron R.F.C. Later, in 1916, the more powerful 160 h.p. Beardmore was fitted and the machine then became known as the Elephant. It was used with great success as a fighter-bomber, usually carrying a single 112-1b. bomb, and in the 27 Squadron of to-day an elephant in the squadron crest is a permanent reminder of the unit's first service aircraft.

The Elephant had a top speed of from 90 to 95 m.p.h. and its principal dimensions were a span of 33 ft. 8 in. and a length of 25 ft. 4 in. It was one of a long line of successful warplanes produced by Messrs. Martin and Handasyde, of which the last war-time example was the Martinsyde F.4 scout which, with a 300 h.p. Hispano, had a top speed of 145 m.p.h. Mr. Handasyde, who built his first aeroplane in 1908, is to-day chief designer to the British Aircraft Manufacturing Co., producers of the Swallow and Eagle series of civil aircraft.

THE SOPWITH PUP

FORERUNNER of the famous Sopwith Camel and a lineal descendant of the Sopwith Tabloid, the Pup was produced early in 1916, and was at once hailed as being one of the easiest machines to fly ever built. Its engine was an 80 h.p. Le Rhône rotary, and for so low-powered an aircraft its performance was remarkable. It could do $106\frac{1}{2}$ m.p.h. at 6,500 ft. and its rapid rate of climb enabled it to reach 5,000 ft. in $7\frac{3}{4}$ mins., 10,000 ft. in $15\frac{1}{2}$ mins. and 15,000 ft. in 30 mins.

The equipment of several famous R.F.C. scout squadrons, the Pup proved its merit on many occasions in combat with the Boelke Staffel. Its armament comprised a single Vickers gun fitted on the cowling to fire forward between the airscrew blades. Tank capacity was 18 gallons of petrol and 5 gallons of oil, and principal dimensions were: span, 26 ft. 6 in.; length, 19 ft. 4 in.; height, 9 ft. 5 in.; chord, 5 ft. 1½ in., and gap, 4 ft. 5 in. Total loaded weight was 1,225 lbs.



Here is an Account of the War in the Air as it really was, Told Frankly and Simply by a Famous Scout Pilot who Fought and Flew with No. 40 Squadron R.F.C. above the Western Front. Its Firsthand Descriptions of Air Combat and its Vivid Glimpses of that Great Fighter "Mick" Mannock, V.C., a close Friend and Fighting Companion of the Author, Form a Record of Personal Experience of Unusual Enthralling and Interest

CHAPTER I Introduction to War

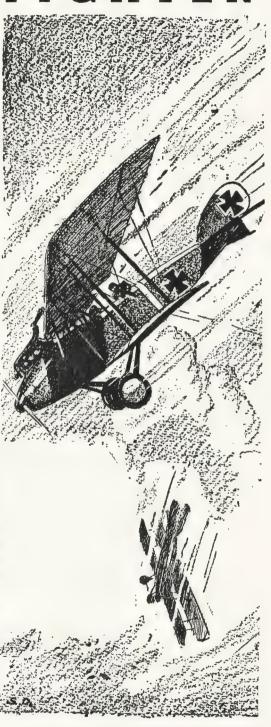
N a serenely warm afternoon at the end of May, 1917, I was being whirled along the pavé road between St. Omer and Aire on my way to join 40 Squadron of the Royal Flying Corps. The road, one of those permanent monuments to the intentions of Napoleon, leading straight to the English Channel, was lined by tall poplar trees which appeared as if they were going to fall over us as the R.F.C. tender tore along at something like fifty miles an hour. The steel-studded tyres maintained a high-pitched whistle as they feverishly gripped the whinstone blocks of the road. The clear, fresh, country air sang in our ears.

The pilot sitting between the driver and myself, "Melbourne" Basset, was the cause of the haste. He had been sent to St. Omer to collect me from the "Pilots' Pool," and in explanation for allowing me only five minutes in which to pack my belongings had said:

"Got to get back quickly. Something on to-night."

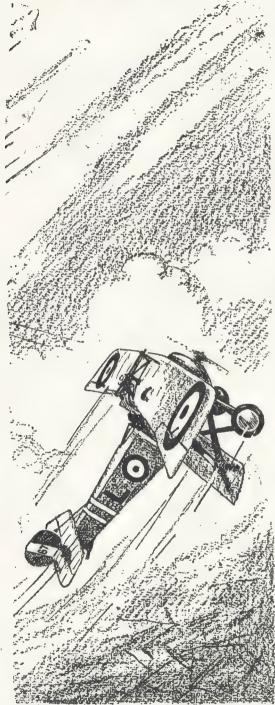
As the car sped along between the rows of trees he dropped into a morose silence, staring straight ahead of him as if there were something at the end of the road of which he was afraid. In reply to my questions about the squadron and the machines, he answered only in monosyllables. Poor Basset, something

FIGHTER



My victim was diving at an increasingly steep angle, when the sound of gunfire called my attention to a new menace . . .

PILOT



. . . and circling round suddenly, I caught sight of a dark machine with a pointed nose, its observer clearly meaning business

The Vivid Record of a Pilot's Life in One of the Most Famous R.F.C. Scout Squadrons of the Great War

By "McSCOTCH"

Late of No. 40 Squadron, R.F.C.

was going to happen, but not until the next morning.

It was my first journey to the "line," that magic and tragic word that embraced the whole of the battle areas of Northern France and Flanders.

On that road, along which so many were never to return, the taciturn attitude of my travelling companion gave me time to think. After two years in the infantry at home I had come to the conclusion that at twenty, with two years of very nondescript training mostly as a specialist in bombing and musketry, I was not in any way qualified to accept responsibility for the lives of a platoon of men. All through my training, the thought of twenty-two lives depending on my word of command had appalled me and, on confiding my fears to a friend, I was given some very acceptable and practical advice. This friend, who had been sent to France in the first month of the war and who was killed in France the day before the Armistice, had said: "The right place for you is in the Flying Corps. Fellows like you that need 'holding down' can do ten times as much good in the air as they ever will on the ground."

TWO or three more months passed without any sign of being sent overseas, so I had transferred to the Flying Corps. Even then, the thought of having the life of an observer in my hands made me determine to become a single-seater, or "scout," pilot; I wanted to fight alone, relieved of the knowledge that a mistake on my part would cost another fellow his life. Besides, the endorsement on my

Training Brigade Transfer Card written in red ink, "Rotary Scout Pilot," meant much more to me than the certainty that I was going to be clear of responsibilities. The title, an honourable one from 1916 to 1918, although meaningless nowadays, translated into modern terminology signifies a "Single-seater fighter who is capable of flying aeroplanes with rotary engines."

Single-seaters were originally called "scouts" because they were designed to act as the "eyes" of the infantry; the latter, confined to the trenches, were, through the single-seater, given some knowledge of the enemy dispositions and movements.

By 1917, however, the term "scout" no longer applied; reconnaissance work was carried out by two-seater machines, and single-seaters were relegated (or promoted) to the more aggressively active task of offensive and defensive fighting. The scouts fought in the vanguard of every attack in 1917 and 1918; their spectacular work made them appear as the gladiators of the war, particularly after Captain Ball, the V.C., had brought the single-seater pilot into the limelight by demonstrating the destructive value of a spirited fighter.

So it was that on the way to joining 40 (Scout) Squadron at Bruay, I had a definite feeling of fulfilment. The red endorsement on my card had been the first part of my ambition. Now, I was going to take my part in the Great War, to kill my country's enemies and to meet new friends, to live at such a pitch that the memory of it is as fresh to-day as when it all happened. What it was really going to be like or what it was going to mean to me I had no suspicion. At any rate, there was no premonition, no fear in my mind; my only emotion was anticipation.

THE car passed through one town, and on entering the market square of another, Lillers, Basset climbed out to dash into a bakery. He was in a terrific hurry, as if "Cutty Sark" were on his heels, and when he came out carrying parcels of bread and cakes he

almost gasped:

"We ought to do it!"

The car continued its race along a now dusty road, while I wondered why Basset was in such unseemly haste. But his preoccupied manner discouraged questions. I was curious to know; to get a glimpse of what was "going to happen," but it was not until several days later that I found out the reason for Basset's fear. One or two pilots had been suspected of evading patrols through subterfuges, and Basset, to prove that he did not belong to that gutless and fortunately rare type, was hurrying back so that he would be in time for a flight patrol, even when his early return meant inconvenience to me, to the driver, and risk to the car with its three occupants.

We stopped at a closed level-crossing in Bruay; Basset took out his watch, glanced at it and immediately relaxed, "We've done it all right."

As we finally slowed down alongside an aerodrome on which four or five Nieuports were standing, he thanked the driver, jumped out, and hurried into one of the canvas Bessoneau hangars.

The camp was about a hundred yards up a lane on the left-hand side of the road and consisted of ten or eleven small, brown, canvas Armstrong huts surrounding a red ash tennis-court with a large black wooden mess hut standing twenty yards away on the north side. There was a game in progress, and the sight of four fellows, three of whom were in flannels, playing an energetic game of tennis "up the line" came as a great surprise to me. I had thought only of khaki and the duty side of fighting, not of the relaxation between times. general impression surrounding the camp was that of a peaceful tennis club at home.

I asked one of the pilots who were sitting round in deck-chairs where I might find the Commanding Officer.

"You're the new fellow?" he asked. And on my admitting that I was he gave me a cheery, welcoming smile.

"That's the C.O. over there," indicating a young, rather florid-faced youth, at the far side of the net. "But you had

better not disturb him till the set's finished."

The latter, when the rally was finished, waved his racquet to me. "You the new pilot? See you later—when we've won this set."

The sun was beating down on the court and the perspiring players fought a well-contested game. Overhead the noise of five rotary engines almost deafened us as a flight fell into formation. It was the first time I had seen a whole flight of the same type of machine together, and I was fascinated by the aluminium-coated Nieuports circling round as they fell into a "V" formation behind a machine with streamers on the struts and tail. They were going out to fight. Basset was in one of them. It would soon be my turn.

When the set was finished, the C.O. came over to me and, after making fun of my long and (to an Englishman) rather unpronounceable Scotch name, asked me if I had ever flown a Nieuport.

On being told that I had, he called out to the others: "Come on, here's a fellow from Smith Barry's squadron who has flown a Nieuport. Let's watch what he can do!"

This was another surprise; I was not even being allowed to unpack, find a hut, or to get into flying-togs, but was to be hurled forthwith into the air to "show them what I could do."

Major Smith Barry commanded No. 1 Reserve Squadron at Gosport, a scout instructional squadron which was regarded as the training centre for "stunt pilots"! From the C.O.'s remarks it was obvious that he expected something unusual from me.

CHAPTER II

Landing-according to Gosport

MECHANICS dragged out a Nieuport, someone lent me a flying helmet, and I climbed into the cockpit, confident in my ability to give a demonstration of first-class flying. It did not occur to me that when confidence predominates over caution the result is usually an anticlimax.

There were many interesting features about the Nieuport. Her wing span was no more than twenty-seven feet, the upper plane being almost twice the breadth of the lower one. The sole support between the planes, apart from the centre-section, was a "V"-shaped strut on either side and, because of this and the fact that only two landing wires and two flying wires were necessary, the 'planes presented a smart and tidy appearance. The whole fuselage, wings and tail-plane were painted with aluminium dope which had earned the Nieuport the name of "Silver Hawk" from the infantry. The engine was a 110 h.p. Le Rhône, a nine-cylinder rotary engine, controlled by a throttle-lever, and a mixture-lever operated by the pilot's left hand.

With this double adjustment it often proved exceedingly difficult to obtain the correct firing mixture for an engine and, until a pilot became accustomed to his own there was always some danger of choking it and stopping the propeller. While practising on a borrowed Nieuport at St. Omer I had learnt that it required nearly three thousand feet of vertical dive to restart an engine; so that "losing one's prop." close to the ground entailed a hurried landing. The Nieuport's top speed on the level was about 95 m.p.h., a speed which, to road hogs and pilots of modern aeroplanes, may appear ludicrous for a fighting machine. But in 1916, when the Nieuport was first brought into action against the German Fokker, this speed represented the fastest that was then attainable by a war aeroplane.

Unlike modern aircraft built for pleasant flying, the war machine did not require to be stable. In fact, one of the reasons for the efficiency of the Nieuport was that she was inherently unstable. A pilot had to "fly" all the time he was in the air for, immediately he relaxed his hold on the joy-stick and rudder, she would push her snub nose up into the air and, after completing a turn of a roll, spin slowly and insistently to the ground. This proclivity made her an excellent fighting machine, for once a pilot under-

stood these idiosyncrasies he could utilise them to assist in the carrying-out of quick manœuvres. I doubt whether any war aircraft of either side ever surpassed the Nieuport in ease of control in the type of flying we had to employ in aerial dogfights.

Such was the machine I was supposed to stunt for the edification and amusement of seasoned war pilots. The result was almost a fiasco; but it found me a friend.

In my haste to get into the air, I evidently did not pay sufficient attention to the throttle and mixture controls. When I had climbed a thousand feet the engine coughed, spluttered and, to my utter disgust, stopped altogether with one blade of the propeller standing defiantly straight up in front of me. At a thousand feet there was no room to dive to restart the engine, so, determined that I would at least perform one of No. I Reserve Squadron's pet stunts, I allowed the Nieuport to stall gently and then, as her nose went down, kicked her into a spin.

At that time in England, except in No. I Squadron, to get into a "spinning nose-dive," as it was called, was regarded as almost certain death, and although it was occasionally used by war fliers when avoiding enemy scouts who had succeeded in getting above them, it was rarely practised close to the ground. The newspapers then always described it as a "Deadly Spinning Nose-dive," scaremongering which probably had its demoralising influence on many pilots who lacked confidence in themselves or their instructors. To get a machine out of a spin one had to do the opposite of what one would at first sight expect. As the machine was pointing to the ground the natural reaction was to pull the joystick back to raise the nose, but, actually, the only way to stop the spin was to push the stick forward as if for diving, and to wait until the machine turned the spinning nose-dive into a straight dive before straightening out. At No. 1 R.S. all of us had become so expert at this that we could land straight from the last turn of a spin.

Without the engine propelling her, my Nieuport that afternoon behaved like a perfect little lady. She dropped her nose gently, turned round into the first turn of the spin with an easy grace and, still properly under control, commenced to spin slowly to the ground. With only the sound of the air whistling past the struts and wires I felt perfectly happy, watching the ground swirling round underneath and rising to meet me. At the correct moment I eased the joy-stick forward, straightened out, and did a perfect landing on the middle of the aerodrome.

I waited for the mechanics to start the engine, but when they ran out to me one of them said:

"I think the Major would like to speak to you, sir."

I had quite forgotten the effect the spin might have on the onlookers, and much to my amazement on approaching the C.O., he turned away from me and walked towards the road.

Hurrying after him I stammered: "I'm sorry, sir," but with a wave of his hand to show he did not want to speak to me, he walked on. The other pilots avoided me, so, disconsolate, perplexed and annoyed, I strolled towards the hangar. The attitude of the C.O. seemed quite unreasonable. Admittedly I had failed to control the engine, but I had certainly landed the machine whole.

MUTTERING rebelliously to myself, I caught sight of a tall, weatherbeaten pilot almost shaking with mirth. Anger nearly got the better of me; I glared at him until, nodding in the direction in which the C.O. had disappeared, he said:

"He hadn't much to say to you, had

Something in his healthy ruggedness arrested me.

"No, it was a pretty miserable show, wasn't it?" I replied, wondering what devilment made this strange pilot laugh. "But why couldn't he wait until I explained?"

"Because he was absolutely speechless," was the surprising reply. "They all thought you were going 'plonk' into the ground. We don't like watching fellows kill themselves, and Tilney (the C.O.) looked away when he thought you were finished."

At this his laughter burst out anew in hearty guffaws, and when these had subsided he turned his searching blue eyes on me.

"Tell me, honour bright, did you shove her into that spin intentionally? I saw you kicking your rudder."

I told him it was a favourite stunt, and asked: "Do you think he'll send me back for further instruction?"

"Not Pygmalion likely," he said emphatically, "not when he knows you did it intentionally." Then, as an afterthought: "You pulled her out of it very nicely. If you can handle a machine like that we want you in this squadron."

Ever afterwards I felt grateful to him for those friendly and encouraging words. They saved me my self-respect and at the same time showed me that he had a somewhat "Puckish" sense of humour. In using 4 not Pygmalion likely," he was bowing to authority which decreed that "not bloody likely" was as unsuitable for an officers' mess as it was supposed to be in Bernard Shaw's play "Pygmalion." His keen sight had enabled him to observe the movements of my rudder and, seeing the consternation and horror on the faces of the others had caused him the keenest amusement. As we walked to the camp little did either of us dream that this same sense of humour was to save our nerves on many later occasions.

"But that was a pretty dud show of handling an engine," I remarked. "I simply couldn't get the mixture right once she was in the air."

At this he looked serious. "I don't damned well wonder. That machine belongs to Jake Parry, and no one else in the squadron will take her up. In any case, the old crock is going back to the depôt, that's why they sent you up in her."

He thought for a few seconds. "I've always told them they'll kill someone through sending fellows up on their first solo on theworst machine in the squadron. That's what shook their insides when

they thought that that engine had put 'paid' to you."

This was the beginning of my friend-ship with Mannock. He was then twenty-eight or twenty-nine, and had been two months in France. Everything about him demonstrated his vitality. His alert brain was quick to elucidate a principle, and an unbroken courage and straightforward character forced him to take action where others would sit down uncomprehending. I was awed by his personality and the fact that he was evidently a seasoned war pilot.

WE walked back to the camp together, and on reaching the first hut nearest the entrance, he looked in:

"Here you are, in Blaxland's hut," he said to me, and to Blaxland who was sitting on the bed writing: "Here's your new mate, Blax. Look after him before he kills himself."

Blaxland was the one who had greeted me on my arrival, a quiet, good-natured pilot, possibly two or three years older than myself. His sedate manner created an impression of a dignity beyond his years and the moderation of his opinions and his quiet voice inspired respect.

Our orderly, Finlay, had unpacked my belongings, and everything in the hut was in order, even to my shaving tackle standing on a shelf above an enamel wash-basin. Finlay's kindly attentions must have helped to brighten the lot of many pilots, and he was the most efficient and unobtrusive orderly it was ever my luck to have.

As Blaxland continued his letterwriting I sat down to write too, to tell my people all about my experiences, hoping that they would appreciate my joy at being "up the line." There was a romance, a spirit of adventure, secrecy, ambition and fatalism in the address— "40 Squadron, R.F.C., B.E.F., France."

After the departure of the flight which had taken-off during the tennis match, an air of peace had descended over the camp. We were only eleven miles from the front line and yet there were no signs of war, no excitement, no bombardments, no shell-holes. Bruay itself had appeared

to be quite untouched by the war; children played in the streets; miners walked about in their blue pit clothes, the engines at the pit-head belched thin steam into the air, while above, the black smoke curled slowly from a tall chimney-stack. I had expected ruins, and "Tipperary"-singing soldiers; instead I had found peace. Possibly the war, the real devastating, detonating war was nearer than it appeared to be.

I wanted to ask Blaxland about it, but he was writing busily.

CHAPTER III Lost over the Lines

THE next morning I awoke in a new world. The quiet serenity of the previous evening had given place to bustle and the noise of Le Rhône engines revving full out.

Finlay, the cheery one, was standing over me with a cup of tea in one hand and a plateful of biscuits in the other.

"Good morning, sir," he greeted me.
"You are due to leave the ground at six-thirty, and it's now six."

Blaxland was sitting up in bed drinking his tea, and on Finlay's departure I could not refrain from remarking on the luxury of getting early-morning tea. In the infantry we had been accustomed to washing, dressing, parading and doing an hour's physical jerks before breakfast without any such home comforts.

In a few minutes Finlay returned with a jug of hot water which he emptied into the basin, laying the neatly folded towel on the side.

"Do your clothes require any attention, sir?" he asked me.

Wonders, I felt, would never cease.

While dressing, Blaxland showed me a map of the front, pointing out the different landmarks; two pyramid-like dumps at Auchel, a peculiarly-shaped wood behind Vimy and the two reservoirs alongside the La Bassée canal.

"These are the principal ones," he said, "but when you get over the lines you'll be able to make your own notes. We're about eleven miles from the front line now—just far enough to let us

get a comfortable height before we cross."

When we were in the air my eagerness to see the lines for the first time made me forget all about the landmarks. Blaxland climbed steadily towards the east and in six or seven minutes we were flying over trenches that earthworks and stretched as far as the eye could see both to the north and the south. The ground, for miles on the east and west of these trenches, was pock-marked with shellholes amidst which we could discern the crumbling walls of shell-blasted houses. Except for one town, Lens, there was no sign of civilisation underneath us, but Lens, although the streets and houses were well defined, showed no signs of peaceful occupation, no smoke from the bare chimney-stacks, no traffic in the streets-a deserted town just behind the German lines.

As we climbed, our horizon gradually widened and I could see a smaller town to the north, La Bassée. We continued climbing towards a bank of clouds, on reaching which, having found it rather difficult to play "follow the leader" without any obstacles in the way, I promptly lost sight of Blaxland. Presuming that he had intended ascending through the clouds, I looked about for him on top of them, but in vain; the vast expanse of shimmering cloud showed up no machine. Confidently expecting Blaxland to appear any minute, I continued on my route without heeding the direction in which I was flying.

T the end of a quarter of an hour, ABlaxland not having appeared, I descended through the cloud to look for him. To my dismay, when I again got a clear sight of the ground, the trenches were in the far distance and the Auchel dumps and Bethune reservoirs had dis-Nearer me than the shellbespattered trenches was a line of newlycut earthworks that looked as if they had been built as a model. (This was the Hindenburg-Drocourt line about four miles on the German side.) I was examining them and wondering vaguely whether our side of the trenches was to

FIGHTER PILOT

the east or the west, when, nearly choking with astonishment, I heard violent explosions that appeared to encircle me. One, in front of me, was so close that within a second my machine was flying through the pungent black smoke. There was no doubt that the Germans occupied that side of the line.

This was my first taste of "Archie" and, thoroughly scared, I put the nose of my machine down and scurried towards the trenches as quickly as possible, to the accompaniment of sharp cracks and thuds behind me. Only when I was again on our side had I the courage to look back, to see a straggling row of "Archie" bursts strung out in fours and fives along the course I had flown.

On my right was an unmistakable machine, an F.E.2b, one of our bombing and observation two-seaters. Being new—and with a desire to let someone see I was "at the Front"—I flew close to the F.E., but on noticing the observer standing up to aim his Lewis gun at me, I flew underneath to let him see my circles. I did not then realise that, as I had approached him from the sunny side, he could not see my machine clearly enough to recognise it as British.

There was no sign of Blaxland nor of the Bethune reservoirs. I was in a strange part of the line with no idea whether I was north or south of the sector over which I had crossed. invariable custom in England when in doubt as to which way to turn when I came to the coastline had been to fly for seven minutes in one direction, and if that proved to be wrong to return and fly in the other, climbing all the time so as to enlarge my view. In the circumstances I acted on the same principle, flying northwards first. Presently I spotted four machines approaching from the east. When they came near enough to let me see their outlines I failed to recognise them, and considering it wiser to avoid them, turned west; for even had they been British they would probably have led me farther astray. I had descended to four thousand feet in my precipitate flight from "Archie," so, climbing again, I saw the Auchel dumps

many miles away to the north-west.

On reaching them, failing to see Bruay and finding that there were two aerodromes near the dumps, I landed on the nearest to enquire the direction of 40's aerodrome.

When I ultimately arrived at Bruay it was two and three-quarter hours since my departure—longer than our supply of petrol was supposed to last; and Blaxland was much relieved to see me.

There was a joke in the squadron that every new pilot who lost himself flew straight towards Berlin. On one of these instructional flights over the lines which took place just before my time, the experienced pilot who was forced to return without the pupil because of the latter's evident desire to fly east, when asked by the C.O. where the pupil was, replied:

"Oh—him !—why, he's in Berlin by this time."

CHAPTER IV Offensive Patrol

PAILING to follow my leader and losing myself invalidated my first educational flight and, that afternoon, Blaxland again had the unpleasant duty of taking me up. This time, after some sympathetic coaching from him, I succeeded fairly well, and in the evening was posted to "A" flight.

The flight was commanded by Captain Bath, a tall Canadian who, before the evening patrol, gave me a sound piece of advice:

"If you lose the formation, and it's quite easily done," he said, "fly west. But this will be a line patrol and you should have the trenches to guide you."

Even so, he took the precaution of examining my compass and then told me that I was to fly at the right-hand extremity of the "V" formation.

One pilot, Walder, came over to my machine and switched off my engine which was ticking over, so that he could say:

"If any Huns come down on you from behind, dive straight underneath the formation—don't wait to let them get vou."

We fell into formation at three thousand feet over the aerodrome, behind Captain Bath, whose Nieuport could be quickly recognised by the three flight-commander's streamers attached to the struts and the rudder. To facilitate recognition of the deputy leader, in case Bath had to leave the patrol, Walder's machine had a streamer on the rudder only.

Bath headed straight for the lines at Lens, and on arriving there turned north directly above the clearly defined front-line trenches. Eleven thousand feet proved to be a comfortable height for the German "Archie" gunners, and Bath's course was a series of dives to the northeast followed by climbing turns to the north-west. Despite this, the "Archie" bursts kept pace with us and, scared by the explosions as well as finding it difficult to keep my position in the formation, I paid little attention to what was going on.

We drew near a large town (Lille) and our leader wagged his planes from side to side. This, the recognised "enemy in sight" sign, made me examine the air ahead of us and I saw a green and yellow two-seater, just as Bath dived on it. I could see the flaming tracer bullets pouring from the guns of the two leading machines and the two-seater diving away from them. I did not see what happened to it.

The flight then turned south and climbed to fifteen thousand feet, which it reached at Lens before the second beat of the patrol commenced. Flying on the extreme right of the formation my machine was farthest east, and every time Bath turned it was my misfortune to find myself amidst a burst of "Archie." Finally, for some reason or other unknown to me at the time, the "Archie" ceased.

I flew along quite happily about a hundred feet above and to the rear of Walder, and finding that I could keep formation much better than on the previous trip north, my confidence increased. "Educational flights are over," I thought; but something that

happened a few minutes later quickly dispelled this illusion.

I heard the sudden tat-tat-tat of a machine-gun and saw trails of smoke passing my machine between me and the right wing-tip. Glancing round hastily, I caught sight of a pointed-nosed machine diving straight past my tail-plane. No sooner had it disappeared than the tattatting was repeated and another storm of smoke streamers flew by. I turned right round this time, to see another enemy machine pulling up out of a dive. The pilot flew above me for a little bit, but to my disappointment, he turned off east. I could clearly see his black and white crosses and his small undercarriage wheels.

I afterwards understood how, quite unwittingly, I had done the right thing. The Germans in attacking in this way hoped that by doing so they would separate me from the flight; but by my remaining in the formation and not even diving underneath Walder, their tactics were foiled. Knowing this, the flight proceeded as if nothing had happened.

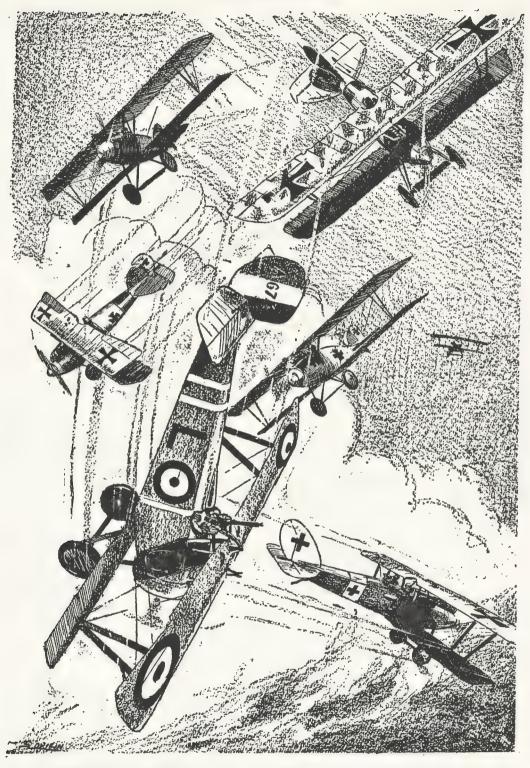
Having finished the patrol without further incident, Bath turned away from the lines. This caused me some surprise, for the time had passed so quickly that I was under the impression we had not been over an hour in the air.

AT Bruay we landed in turn, and on climbing out of my machine I found a heated argument taking place between Walder and Bath. The former maintained that it was dangerous both to the pilot and to the flight to allow an inexperienced beginner to take up the rear position.

On examining my machine they found several bullet holes in the right wing, and while the other pilots were filling in their combat reports, Walder took me aside and asked me if I hadn't seen the Germans.

Walder was serious-minded, but could not help showing his amusement on learning that my first intimation of the presence of the enemy had been when bullets were actually passing between my wings.

FIGHTER PILOT



In my anxiety and haste I pulled the wrong lever and the heavy Lewis gun hit me a stunning blow on top of the head

"But why on earth didn't you dive as I told you to?" he asked.

"I forgot, and I was too interested in seeing what a German machine looked like, anyway," I replied.

He then gave me another bit of information. "Whenever you hear a machine-gun, you may bet there's someone firing at you."

This first official patrol amply demonstrated to me that my education was only just beginning. In fact, almost every subsequent flight for several months revealed some new feature of aerial warfare to me. It was like going to school for the first time. The principal points about my first baptism of machinegun fire were: that I had not seen the German until after his bullets had missed me, and that, observing that someone was shooting at me, I had made no attempt to get out of his line of fire.

We had no time to change for dinner as it was nearly eight o'clock, and hastily slipping off my flying boots, I hurried into the mess. Dinner was in progress, and on taking my place I looked round the table to recognise the pilots. Failing to find Basset there, I committed a terrible breach of fighting squadron etiquette by asking where he was. The pilot sitting next me said "shush," while Mannock, opposite me, gave my foot a kick.

When the lugubrious meal was over, Mannock, whose nickname I learnt was "Mick," told me that Basset was in hospital with an explosive bullet in his leg. He also told me that as the spirits of the younger pilots had to be kept up, we were strictly forbidden to mention a casualty at mealtime.

It took me some time to get to know the other pilots, and although there were only fourteen or fifteen of us, several disappeared before I even knew their names. Of the others, Bond, Redler, Hall, Godfrey, Lemon, Captain Allcock, Shaw, Parry, Captain Keen, Walder, Cudemore and New formed a hazy background to my first impressions of the squadron. The friendliness of Mannock, Blaxland, Walder and Lemon helped me to get over the difficulties of the first few days, and, with the mental stimulus

obtained from evening walks with Mannock, my attitude towards the war underwent a distinct change. The feeling of uncertainty and insecurity that previously had haunted me no longer persisted.

FEW evenings after my arrival, A Captain Bath, leading us on a patrol between Lens and Lille, got into a scrap with some enemy fighters, and I had another bitter disillusionment about my capabilities as a fighter pilot. seeing Bath wagging his wings to signify that enemy machines were near, the whole of the flight commenced to stunt and to whirl about in a most disconcerting way. I did not see much of the scrap, which proved to have been a veritable dog-fight for, except that the surrounding air seemed to be full of zooming, turning, and diving machines, I did not recognise more than one of these as German.

Fortunately for me I had not caught the attention of any of the enemy, and after examining my Nieuport, Bath declared that I was a "stout fellow." I had stuck in a scrap and had not even a bullet hole in my machine. This unmerited praise made me all the more conscious of my unpreparedness for aerial fighting. To have been in a fight without having been able to discriminate between friend and enemy struck me as being a highly dangerous form of stupidity. There had been seven German machines in the scrap and I had seen only one.

It was unfortunate for me that I did not confide my worry to Mannock, for several weeks later he told me that he had had similar experiences, and that by the time I joined the Squadron he had passed that stage in his development.

In this haphazard schooling our knowledge of actual war fighting was tempered on the hard anvil of experience. We won each item of wisdom only at the risk of our lives. The fault did not lie so much in the actual flying training as in the lack of instruction in the psychology of fighting. Nothing had been done to key me up to the dangers that assailed us.

FIGHTER PILOT

CHAPTER V A Rabbit Goes Hunting

DURING my first two weeks with the Squadron there seemed to be a considerable number of departures and arrivals. Several pilots, amongst whom was Captain Allcock, were reported missing, and several others were posted to Home Establishment after having served over six months with the Squadron.

In the British attack on Vimy Ridge, R.F.C. casualties had been particularly heavy, and pilots who had been through that strenuous time were tired and nerveracked. To allow them time to recuperate, it was the custom to return them to England to act as instructors or to take up night flying in defence of London and the important towns. After three or four months of that they could expect to return to France, either to the same or to a different fighter squadron.

During the battle of Arras, in April, 1917, the Nieuport was the premier fighter on our side. Its armament consisted of a single Lewis gun mounted on the top plane in such a way that it fired above the blades of the propeller, thus making the pilot fire fifteen degrees above his line of flight. When attacking an enemy machine from above, the Nieuport pilot had to dive at a much steeper angle than would a pilot who could fire along his line of flight with guns that were synchronised to fire between the blades of the propeller.

Opposed to the Nieuports were the German Albatros and Halberstadt fighters. These were faster than the Nieuport, carried two Spandau machine-guns which fired through the propeller, and could dive at between 200 and 225 m.p.h. With machines like these an enemy pilot could act according to his mood or his spirit. If he wanted to fight he could remain to do so, but if he thought that discretion was excusable he could avoid a combat either by flying straight or diving.

It also meant that the unfortunate Nieuport pilot, when the enemy cared to face him, had to use every ounce of his flying and fighting ability to vanquish his adversary. When driven into a tight corner by superior numbers or by being taken at a serious tactical disadvantage, the Nieuport fighter had to depend entirely on his flying skill and determination.

The double-sized drums carried by the Lewis gun held ninety-six rounds of ammunition, and when a drum was exhausted the pilot had to fly his 'plane with his knees while using both hands to let down the gun and to change drums. The Germans, on the other hand, could fire five hundred rounds without releasing their firing levers. In both cases the guns were controlled by levers on the joy-stick.

DESPITE these advantages that the enemy fighting 'planes had over the Nieuport, the latter was by no means obsolete, as I was later to find out. Also there was one asset that frequently was worth more than speed or guns—the spirit of the pilot. At that time and, in fact throughout the War, our fighter pilots waged an aggressive war, often many miles on the enemy's side of the trenches.

The Germans had fewer fighting machines than we and, either on account of this or because they lacked the truly aggressive spirit, their tactics were deficient in the confident abandon that appeals to the British.

They always waited until their natural advantages placed us at their mercy before attacking us. Their only reason for entering into a combat was victory, the destruction of our machines and our pilots. Whenever the game was easy the enemy showed themselves to be capable and relentless antagonists. In addition there was the west wind, the prevailing wind in the north of France. It carried us quickly over the lines, but it also caused us to take almost twice as long in traversing the same course on the journey. The anti-aircraft gunners then had time to get our range correctly, and when in difficulties through engine failure, wounds, or other trouble, our chances of regaining the safety of our own lines were slight.

My own experience, alone and with the

flight, was that the farther the Germans were on their own side of the trenches the more aggressive they became, pressing home every advantage, both tactical and psychological. A pilot being attacked many miles over hostile country by an enemy flight was apt to suffer from that "far from home" feeling that inspired Bairnsfather's famous war cartoon about "Dirty work at the Cross-roads."

My own most acute attack of this "far from home" feeling took place about a fortnight after my arrival.

On two consecutive evening patrols the flight had attacked a German two-seater, a yellow camouflaged artillery co-operation machine that patrolled near Lille. On the evening following the second effort, the rhythm of "Poet and Peasant" being played on the gramophone stirred me to activity. Sitting on the tennis court, ruminating on my inability either to spot the enemy or to shoot at him when I did succeed in seeing him, the recollection of the yellow machine combined with the music imbued me with the determination to shoot it down.

I set off at once, and as I had expected, on approaching Lille amidst a cloud of "Archie" bursts, the sight of my bête noir flying an elliptical course north and south provided me with my first real thrill. The sun was low on the horizon and the yellow and green markings showed up clearly from over a mile away. My head singing with hope and murder, I flew straight towards him; with the warning of "nasty stings in their rumps" ringing through my head. (The "stings" were the guns of the observers in the back seats.)

The "Archie" shelling ceased abruptly, and the two-seater, instead of diving away as I had anticipated, only eased off a little to the east. I was at about eight thousand feet with the enemy about two thousand below my level and, diving on him with the wind whistling through the wiring and the Le Rhône engine purring away easily, I pressed my eye to the Aldis sight. The yellow shape came properly into the lines and circles that enabled us to make allowances for

the relative positions and speed of two machines and, breathlessly manœuvring my Nieuport so that there should be no doubt that my bullets would hit the enemy, I pressed the firing lever.

Nothing happened, there was no clackclacking of the gun. I had forgotten to cock it.

Being then within two hundred vards of the enemy I had perforce to pull out of the dive. As the gun was on the top plane the cocking lever was attached to a wire which hung down inside the windscreen alongside the wire which liberated the front of the gun to allow it to be lowered for reloading. In my anxiety and haste I pulled the wrong one, and the heavy weight of the Lewis gun hit me a stunning blow on the top of the head. Possibly the thickness of my flying helmet prevented a complete knock-out. As it was, I was blinded and almost senseless when the pop-pop-pop of several machineguns sounded from above. Hardly conscious of what was happening I threw my machine into a spin.

Urged on by the machine-gun fire, my wits returned quickly, and to my amazement and horror I saw six or seven machines circling round me and taking turns at firing at my spinning Nieuport.

It was then that "lonely cross-roads" feeling assailed me. My machine was seven or eight miles from the lines, I was dazed and almost sick both with shock and fright, and my machine was still spinning.

SEEING no alternative to a sanguinary mess on the ground if I continued, I pulled out of the spin at two thousand feet, only to be met with a veritable cloud of smoke streamers from the enemy's explosive bullets. Their trails shot past to right and left, and amazed that none of them had hit me, I began to fly crazily, hoping that none of them would find its mark.

As I dived, sideslipped, half-rolled and threw the Nieuport about as if I were trying to break her in an attempt to avoid the terror of a flaming end, the Germans attacked me with all the vigour of a pack of hounds after a defenceless stag.

FIGHTER PILOT

The vivid sunset in the west threw up the darkness of the ground into sharp relief and, twisting and turning towards the distant safety of our lines to the accompaniment of the pop-pop-pop and poppety-pop of the German machine-guns, an overwhelming feeling of self-pity overcame me. I felt as if I wanted to dive straight into the ground—to finish it all.

This was fortunately a transient emotion and in a few seconds, glancing back at the faster machines behind me that seemed so intent on committing cold-blooded murder, I began to swear and curse everything from my own stupidity to the Kaiser.

On one of the turns I succeeded in loading the gun, whereupon my spirits returned to such an extent that I was considering rounding on the Germans to curse them with bullets when another horror awoke me. The enemy antiaircraft gunners, fearing that I was going to escape, simultaneously decided to fire every available gun directly ahead of me. There must have been at least twenty bursts within a hundred and fifty yards of my machine; not the small bursts to which we were accustomed when flying at over ten thousand feet, but heavy, nerve-shattering detonations that blasted every atom of courage from me. What had previously been a rout turned into a complete and stomach-shaking panic, driving me to even more frantic evolutions to escape.

At that time it seemed to me inconceivable that the Nieuport could exist amongst the shell bursts, or that the engine, the tank, and I myself could escape the bullets. But luck was on my side, and having kept persistently moving towards the sunset that had smiled so ironically on my flight, the cessation of the shelling came as a surprise to me.

On our side of the line all was peace; the air to the east was a mass of heavy black shell-bursts. With trembling hands and throbbing head, I pushed the Lewis gun back on to its mounting.

I was quite unconscious of having breathed during the whole ordeal, and flying over the now darkening trenches, my breath came in heavy sighs as the clear fresh air went deep into my lungs. My relief at having escaped unhurt quickly gave way to anger, the anger of a puppy that realises it has been teased that it has shown fear of something of which it has no right to be afraid. To prove to the enemy-and to myself-that I was not exactly suffering from a blue funk. I climbed to five thousand feet and recrossed the lines. This time, the " Archie " gunners having wasted so much ammunition on me, fired at me only in a desultory way as I flew southwards towards Lens and home.

Possibly because the only souvenirs my machine had to show for what to me had been a nerve-racking ordeal were a few scattered bullet holes, the same panic never again gripped me. It taught me several lessons, however. The two-seater pilot, having been attacked twice by the same flight at the same hour of the day, had evidently arranged to act as a decoy. In my haste to come to grips with him I had not even thought of the possibility of other hostile machines being in the neighbourhood. I had attacked with enough spirit, but had failed to make the elementary preparation of loading my gun. I had lost my head completely and had mistaken the release wire for the loading wire.

CHAPTER VI The First Victory

DETERMINED that these defects in my training would have to be remedied, I went up on an educational flight the next afternoon to practise handling my gun and to accustom myself to spotting machines.

On the way to the lines I meditated on the methods adopted by the pilots of the Fokker machines in climbing to a great height and then diving straight down on to their victims much in the manner of a hawk. Deciding to emulate them I climbed steadily towards Arras, and then, turning east, practised letting down my gun, replacing it and firing short bursts of four or five rounds. My altimeter read sixteen thousand feet as, still climbing,

I crossed the lines towards Douai.

After a minute or two the anti-aircraft gunners got my range and the shells came up in bursts of four. The first lot exploded a little to the left and above me, but the second was immediately ahead, the nearest burst being only about fifty or sixty feet away. Somehow this did not worry me, and remembering Captain Bath's tactics in these circumstances, I moved to the right for two or three hundred yards before turning again to the east. The third group exploded to my left and a little ahead of me-in the position I should have been had I kept on the same line of flight. By continuing this manœuvre I succeeded in keeping at a safe distance from the bursts until the gunner, getting tired of firing shells into thin air, gave up the attempt to hit me or even to harass me.

My experience the previous evening had taught me to suspect any cessation of hostilities on the part of the gunners, and while still continuing to fly an erratic course, I scanned the sky all round me, particularly above and to the south-west where the sun made it impossible to see anything. In the crystal-clear air at that height the sunlight virtually made one blind on the sunny side and, dreading that some Fokker or Albatros might be sitting up there waiting for me, I flew first to one side, then the other, straining my eyes to see anything that might be hidden in the glare.

Having reassured myself on this score, I searched underneath me for a potential victim, but as far as I could see there was no machine in sight, either friendly or I spent a quarter of an hour hostile. fooling about like this, circling over Douai, dodging the few small antiaircraft shells, and practising all sorts of manœuvres. Then, two black dots that appeared to the north-west gradually resolved themselves into aeroplanes. They were a few hundred feet above my level and were evidently hostile. Climbing to meet them I realised that the lines were ten or twelve miles away. "dirty work" feeling again came into my mind ; but this time I was prepared. I had sufficient height to be clear of dangerous "Archie," and there were only two opponents.

As they dived, a hundred yards apart, I swung round to the left, hoping that by so doing I would have to face only one at a time. Both of them fired bursts in my direction, but the smoke streamers were fifteen or twenty feet to the right of my machine and on turning round at right angles to this course I flew underneath the nearest one and got a good sight on the second. The latter was pulling up, preparatory to turning, when I pressed the firing lever and heard the cheery clacky-clacky of my Lewis gun. The tracer ammunition went straight into the fuselage just behind the engine.

The German was only a hundred yards away and the helmeted head of the observer was clearly visible in my sight—but he was not looking in my direction. I was wondering if my bullets had killed the pilot, when the sound of the other one's gun recalled my attention to him. Circling round suddenly, I caught sight of a dark machine with a pointed nose flying off to the north. The first machine by this time was diving at an increasingly steep angle and I was confident I had obtained my first victory.

With the realisation that I had been blooded, I flew back towards the lines to the accompaniment of the angry barks of the anti-aircraft shells. Approaching the trenches in a long steady dive, my eardrums were nearly shattered by one of the worst explosions I had ever heard. There was only one, and although it was quite two hundred yards from me the detonation made my Nieuport quiver and my heart thump.

On landing, I reported the scrap, but as I had been so far on the enemy side of the lines no one had even seen the machines. It appeared that lack of supporting evidence invalidated my claim. It was also pointed out to me by Major Tilney tha only pilots who had roving commissions were allowed to fly on the other side of the lines.

Nevertheless I felt that this exploit had established me with Godfrey, Bond, Hall and Keen, for the next afternoon Hall offered to accompany me on a similar flight.

This time, despite a twenty minutes' patrol over and past Douai, we failed to find any enemy machines. On the return journey, losing height in preparation for attacking a two-seater which ultimately turned out to be one of our own R.E.8's, the "heavy" "Archie" gunner found our range and his single shell exploded above us with a crashing roar.

Hall was a doughty scrapper, and the fact that he volunteered to cross the lines with me I regarded as a great compliment.

CHAPTER VII Shot Down in Flames

EVERY flight added its quota to my war education, revealing some new and unexpected feature, or making me better acquainted with those I already knew. And how I envied fighters like Bond, Blaxland, Walder, Hall, Lemon, Godfrey, Keen and Redler! They were seasoned, warriors. Both Bond and Godfrey had succeeded in bringing down two enemy machines in one day. They were my idols during those first weeks.

Godfrey, "Steve" as we knew him, had a roving commission, which meant that he could do exactly as he pleased, going up when he felt inclined and landing anywhere on the front. Steve was a Canadian whose speech was as trenchant as his fighting was aggressive, and his warlike Nieuport was fitted with a special gadget of his own to carry a double Lewis gun.

Hall and Redler were South Africans, and with all a Colonial's determination and level-headedness. Bond was English, a correspondent of one of the daily papers. He spent much of his time writing, and there was frequently a good deal of discussion between him and the C.O. as to what would pass the censor. He was about five feet seven or eight, had a cheery smile, and did everything with an unassuming air that increased everyone's admiration. He had the M.C. and bar.

During my first fortnight with the squadron my chief interests were: learning the habits of the line, and

discussions with Mannock. The latter was unfit for flying for several days through getting a small piece of steel into his eye. He became morbid, and mooning round the camp like a bandaged buccaneer, he presented a picture of dejection and misery. On hearing of my scrap near Douai, he seemed pleased.

"That's the only way to learn," he remarked, "but it's no use putting in a claim unless you are immediately over the trenches. The best way to get confirmation is to bring 'em down as corpses on this side."

He seemed very worried at the time, and before his eye was better his turn for leave arrived.

In the middle of June two pilots who had learnt to fly with me were posted to the Squadron, G. B. Crole and Peter Wylie Smith. Crole was an Oxford Double Blue, also Scotch, and "Peter Wylie," as Smith was known, hailed from Australia. Both were good fellows, and Crole, popularly known as "Gerry," having served previously as an observer, quickly fitted into the life of the Squadron. His first solo on a Nieuport was a glaring example of the dangers of sending a new pilot up in a difficult machine.

This particular Nieuport required not only full left rudder, but one had to kick the rudder hard over as she touched the ground. Crole had never conceived the possibility of kicking a rudder-bar quite so hard as this one required, and despite our warning, the machine turned a complete Catherine wheel immediately on touching the ground. Major Tilney and I, followed by the mechanics, sprinted out to the wreck to drag Crole from the overturned fuselage. He was badly shaken and had a bruised leg, but was otherwise unhurt.

Rugger Blues have to be capable of withstanding a good deal of battering without flinching, and despite his injured leg and the shaking, Crole promptly went up in a better machine, this time making a perfect landing.

Peter Wylie, on the other hand, never quite succeeded in mastering the Nieuport. He could land fairly well, but in the air the idiosyncrasies of the machine caused him endless trouble; so much so, that, despite his willingness to go on trying and his undoubted courage, Major Tilney was at last forced to send him to Candas for further instruction.

My short experience had impressed on me the necessity for a pilot having complete control over his machine, and when I explained this to "P.W." it helped to soften the blow. He was determined to come back to the Squadron and, after a fortnight's experience on Nieuports, he achieved his ambition in returning to us.

MEANWHILE, my own education was progressing, and taking the advice Mick Mannock had given me, I spent a good part of the day when I was not on an official patrol with the flight, in chasing up and down the line, frequently making excursions as far as Douai and Henin Lietard. On one such trip, returning towards Arras from south of Douai I was crossing the lines at twelve thousand feet when I caught a glimpse of a dark red and black machine fourteen or fifteen hundred feet below me. There was a thin filmy layer of cloud which periodically obscured my view, but I succeeded in following the German until I could recognise the markings on his top plane. It was an Albatros, red and black, and as I drew up behind it, taking careful aim and holding my fire until within pointblank range, the pilot was looking over the side towards the line, probably searching for an R.E.8 or an A.W. art-obs. machine.

I fired about twenty rounds. The Albatros put its nose up into the air, rearing like a wounded animal, high up in front of me. Then it fell over. With grim curiosity I watched, waiting to get another sight on it in case the pilot was shamming. But it was only too true, flames began licking round the fuselage, and as the machine dived I saw the flames getting larger and longer. A cloud of black smoke belched out of the fuselage, and I knew then that my bullets had found their mark.

It was the first time I had ever seen a machine in flames. Horrified and sickened at having sent a human being, even an enemy, to such a miserable death, I flew away from the spot as quickly as possible—away to the north, towards Lens, never daring to look backwards.

It was a long time before I ventured to land, and when I did the thought of sending in a claim was so abhorrent that I contented myself with saving that I had fired at an E.A. Besides, I was afraid of what might be said of me for using ammunition which could set a machine on fire. The burning machine fell on our side of the lines and, as it happened that I had been the only fighter in the air at the time, ironically enough for me, the burnt remains were brought to "A" flight. By the time these arrived my feeling of nausea had worn off. I had persuaded myself that my first bullets had killed the pilot. The warhardening influence was already at work.

LATER on it was my misfortune to see several of our pilots crashing down to a flaming end, the machine diving ahead of its comet-like tail of black smoke and flames. Thenceforward I came to regard the vision of a flaming enemy without a tremor—but with an inward prayer that the pilot had been killed first.

When a tank is punctured the leaking petrol flows over the pilot's legs and body and the next tracer or explosive bullet sets it alight—a horrible thought, for even in a straight dive it took our machines nearly a minute to descend from sixteen thousand feet—a minute of agonising terrifying seconds, finishing in a cloud of smoke and flames on the ground after the engine had buried itself deep in the soft earth.

Besides the prospect of such an end ahead of us—and it was always a menace because of the presence of tracer and explosive ammunition—we were faced with the dangers of forced landings, badlandings or mechanical trouble, which could result in serious injury or even death. Many times pilots crashed on returning from patrol, the tyres on their landing wheels having been punctured by bullets or "Archie" splinters. Engine failure above or on the other side of the lines usually meant that the machine had

FIGHTER PILOT

to descend amongst trenches, shell-holes, barbed wire or ruins. Crashes of this type were almost a daily occurrence, and yet very few pilots were killed.

A nasty one, however, once fell to my lot, nasty because it possibly did more to shake my confidence in my flying ability than anything had done.

One Sunday morning, while descending to land on the aerodrome, I heard a grinding crash, after which I could not remember anything until, with a glorious feeling of lightness and unreality, a vision of a "Kaloma" in white appeared straight ahead of me. ("Kaloma" was the name given to a popular wartime print of a beautiful and seductive woman.)

"Kaloma" gradually became more and more real, and ultimately turned out to be a nurse looking down on me from the foot of a bed in the Bruay Casualty Clearing Station.

I never succeeded in discovering the details of the accident beyond the bare statement that I had crashed into another machine. Whatever had happened, it proved to me that one could be flying quite serenely one minute, and, so far as consciousness was concerned, find oneself lying in hospital the next. Apart from concussion, my only injuries were cuts and bruises, but the crash, nevertheless, taught me a valuable, if severe lesson—that, during the whole time in the air, a pilot must never relax.

In next month's instalment of his vivid autobiography, "McScotch" relates how Mannock, later destined to become the acknowledged King of Air Fighters, was for some time actually suspected of cowardice, and of how he himself nearly suffered the same stigma when his gun jambed and he was forced to spin out of a dog-fight. He tells too, of 40 Squadron's "hoodoo" piano, of which it was believed that none who touched its keys would live for more than a week afterwards, and of a balloon "strafing" expedition from which Mannock was the only one, out of the six pilots who set out, to return to the 'drome and with a machine so bullet-riddled that it had to be written off.

THE STORY BEHIND THE COVER:

THE FLEET AIR ARM ADOPTS A NEW DIVE-BOMBER

THE latest type of Fleet Air Arm aircraft, the new Blackburn two-seater divebomber monoplane, is featured in this month's cover painting by S. R. Drigin. The two machines are depicted in the course of making a dive-bombing attack on a wireless-controlled aircraft bombing target boat. These high-speed craft, built by the British Power Boat Company, of Hythe, and with their decks and upper-works heavily armoured, are extensively used by the R.A.F. for air bombing practice on moving targets.

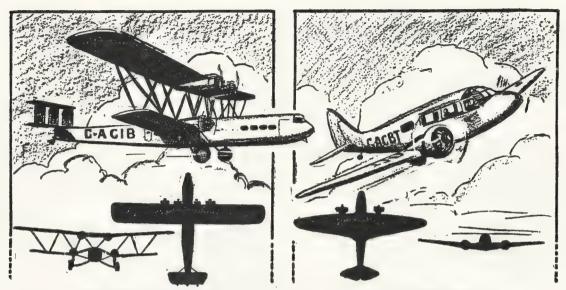
The new Blackburn, the first monoplane ordered for the Fleet Air Arm, is officially described as a dive-bomber-fighter. Divebombing at the tremendous speeds attainable by finely streamlined monoplanes—far in excess of those reached by the biplane with its external bracing struts and wires—places immense stresses on the structure, and the new craft is extremely rigid and robust. Built entirely of metal, its fuselage is a monocoque metal shell—sufficiently buoyant

and watertight in itself to eliminate the need for the flotation air bags usually installed in the wings and fuselage of seagoing landplanes. Even if the two large cockpits did become flooded in a rough sea, the closed compartments at the front and rear of the fuselage would provide buoyancy 30 per cent. greater than is needed to float the machine fully laden except for bomb or torpedo load, which would be released before making a forced descent on the water. Storage for an inflatable dinghy is provided aft of the rear cockpit.

The highly tapered wings, with a span of 46 feet, are fitted with flaps to steepen the landing glide and reduce landing speed, an important point in aircraft that must alight on a carrier's restricted flying deck. The undercarriage is retractile, folding upwards and outwards into recesses in the mainplane.

A three-bladed controllable-pitch airscrew is driven by a Bristol Mercury air-cooled radial engine.

A GUIDE TO SKY-GAZERS — I



THE HANDLEY PAGE 42

air-liner is used by Imperial Airways in two forms. As the "Hannibal" type it has a top speed of 120 m.p.h., carries eighteen passengers and is used on the company's Empire airlines. As the "Heracles" type it carries thirty-eight passengers, does 127 m.p.h. and operates on the European routes. Both types are fitted with four Bristol Jupiter engines and, fully loaded, weigh 30,000 lb.

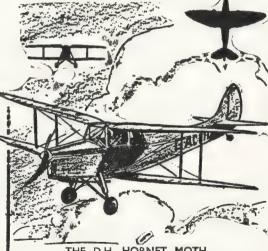
THE AIRSPEED ENVOY

is a widely used type of medium-sized air-liner, carrying six to eight passengers. It is fitted with a retractile undercarriage and the usual powerplant comprises two 310 h.p. Armstrong Siddeley Cheetah engines, giving it a top speed of 210 m.p.h. and a cruising speed of 192 m.p.h. Chief overall dimensions are span, 52 ft. 4 in.; length, 341 ft.; height, 91 ft.



THE AVRO COMMODORE

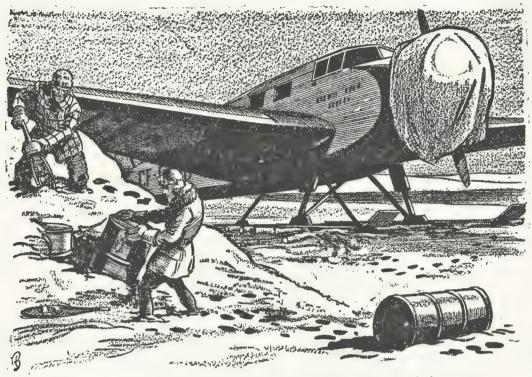
is a luxuriously equipped four-seater cabin 'plane for the owner-pilot or for air-taxi work. Of metal construction, fabric covered, the Commodore has two adjustable pilots' seats in front with sloping windscreen and side windows. At the rear of the cabin is a sofa seat for two people, followed by a luggage compartment. The engine is a 215 h.p. Armstrong Siddeley Lynx radial, giving a top speed of 125 m.p.h. and 4½ hours endurance.



THE D.H. HORNET MOTH,

or De Havilland Type 87, is a popular cabin-type light aeroplane with side-by-side seating for pilot and passenger. The cabin has two doors, sliding windows and a transparent roof. The fittings include dual-control system, wheel brakes and air brakes. Power is provided by a 130 h.p. Gipsy-Major engine, giving the machine a top speed of 124 m.p.h. and a cruising speed of 108 m.p.h. Range is 623 miles and absolute ceiling 17,200 ft.

MURDER IN MID-AIR



Using the webs as spades they set to digging the barrels from beneath the snow!

A Mangy Fox Pelt was the Strange Clue to a Baffling Mystery of Sudden Death in the Skies of the Canadian North-West

By EDWARD GREEN

CHAPTER I

Strange Passenger

HEN Phil Crossman sighted the flat white expanse of the Prince Albert aerodrome he heaved a great sigh, kicked his rudder-bar a trifle to bring his Junkers about and settled down to make one of his customary flawless landings. If he had known he was flying straight into the worst trouble in his long career, he might have sheered away as a wily fox from a trap. On the other hand, he might not.

He had no reason to suspect trouble. He had been up in the Fond du Lac district freighting mining supplies and had called at Atchikan post on Trade River on his way home. There he had picked up a paying passenger, who appeared to be in a great hurry. He was in the cabin now, a sallow, thin-faced, sick-looking man, whom Phil mentally compared to a rabbit.

Old MacKie, the dour Scots trader at Atchikan, had said little about the passenger. He had tossed a small bag of mail aboard, told Phil that Constable Gordon, a "Mountie" at Gull Narrows, wanted to see him and had then returned to his post, a quiet smile on his rugged old face.

At Gull Lake, Constable Gordon, of the Royal North West Mounted Police, had inquired if Phil had seen many new faces up in the gold-mining area, and Phil had replied that the place was full of them. The constable had said something about a man who had absconded with sixty thousand dollars from a bank in a border town of the United States. He had left a note saying he was not long for this world and wanted a little fun before he left it. Therefore he had taken some of the bank's funds.

Phil had shown little interest in the story. He didn't care if all the cashiers in Christendom walked off with every nickel they could find. His thoughts were occupied elsewhere. He had a new set of skis to buy, and some expensive engine parts would be needed soon. It wasn't easy for an independent operator to compete with the big airlines and make a paying proposition of it.

He had been glad when he sighted Prince Albert. A storm was howling down from the north, filling the air with snow. It had been a heavy trip from Gull Lake. Buffeting winds had tossed his 'plane about, and the temperature had fallen to 45° below zero. He closed his throttle, edged his control-stick forward and slanted down.

He taxied close to the hangars and, with a burst of engine, brought the 'plane round ready for a take-off. The action was partly due to force of habit, though something also seemed to warn him that he was not destined to spend the night in the city.

As he climbed from the cockpit four men emerged from the hangar and strode purposefully forward, subjecting him to a critical glance. One of them Phil recognised as a city detective.

"Just got in, eh, Crossman?" the detective said.

Something in the man's tones stopped Phil as he was about to open the cabin door. He glanced at the detective.

"Yes, why?" he answered.

"Bring any passengers?"

" One."

"Good, let's have a look at him."

Phil's gloved hand gripped the doorhandle. He surveyed the detective's three companions for a moment, and his impressions were not flattering. One of them had flaming red hair, a brutal face and a bull neck set on a barrel-like body. The others were rather more personable, but cruelty was evident in their thin lips and pinched nostrils.

"Come on you, move!" the redhead snapped as Phil hesitated.

The big pilot stiffened. He turned slowly, a dangerous light in his grey eyes. His words were cold.

"I didn't get your name, mister."

"I'm Groble, deputy sheriff of Wiebold County. We're after a guy who's cleared out with the bank's cash. These men here are bank examiners. The man's aboard your 'plane. We've come to get him. Now, move."

Phil's grey eyes flamed, and his hands clenched.

"Easy there, Crossman," the city detective cut in. "My name's Bruce. I'm handling this. Groble, you're out of your district and this matter's in my charge. Understand?"

Groble grunted, and Bruce turned again to Phil.

"MacKie at Atchikan reported to Gordon at Gull Lake that you were bringing a stranger in. He tallies with the description of the man we're after."

"Why didn't Gordon make an arrest?" Phil challenged.

"Because he knew you were coming straight here, and thought it would be better to let the man stay aboard for us to pick up. Save him a trip."

"I see," Phil nodded. "Okay. Here he is."

He swung the cabin door open and peered inside. His passenger was still in his seat, a heavy buffalo robe drawn up over his face and a small brief-case at his feet.

"All out. End of the line," Phil called.

His passenger did not move.

"Come on," Phil shouted. "There's a reception committee here for you—and I think one of 'em is Tarzan," he ended, with a glance at the glowering Groble.

Still the passenger made no move. Phil climbed into the cabin, grasped the man by the shoulder and shook him. The buffalo robe fell to the floor. A

waxen, pain-lined face bobbed grotesquely on a nerveless neck, and, as Phil recoiled, his passenger's body slumped over the side of the seat.

"Good God !" Phil exclaimed. "He's dead!"

CHAPTER II Death in the Air

"WHAT?" Bruce started and leapt for the cabin.

"This fellow's dead," Phil repeated.

"He must have passed out on the way over. He looked pretty shaky at Atchikan, now I come to think of it."

The detective made a swift examination of the man, then turned to the others.

"He's dead all right. This'll save us a lot of trouble."

Groble pushed forward and seized the brief-case.

"He was due to croak anyway, so who cares? It's the money we want."

He unfastened the brief case, glanced at its contents and gasped.

"Gypped!" he shouted. "There's not a cent in it!"

He swung round on Phil.

"Where did you say he came aboard?"

"Atchikan. Why?"

Groble didn't answer. He was busy going through the pockets of the dead man.

"Well, Foster's troubles are over," one of the bank men said. His tone was impersonal. He might have been speaking of the weather.

Groble straightened suddenly and turned about. "Yes," he snarled, "his troubles are over, but they're just beginning for somebody else." He glared at Phil.

There was an expectant silence, then Groble rasped:

"This man didn't die a natural death. He's been shot."

"Shot!" Bruce exclaimed, incredulously.

"Yes, shot, and it isn't going to be hard to find the fellow who did it."

Phil stared. His passenger shot. Yet the man had climbed into the 'plane without assistance. He looked sick and shaky, it was true, but he did not appear to be injured. It didn't seem possible.

"Suicide, I suppose," Phil said.

Groble flung him a withering glance.

"Yeh, sure—he shot himself and then threw the gun out of the window."

Phil gritted his teeth and stepped forward to examine the wound in the dead man's breast. It was a tiny hole, bluerimmed and wicked. Very little blood was evident. As he bent forward Phil was conscious of accusing eyes boring into his back. He straightened swiftly. A premonition of danger came upon him.

In a split second he realised his position. By their very silence, these men were practically accusing him of murder. There were witnesses to swear that Foster. the dead man, was in fair health when he boarded the 'plane at Atchikan, yet on arrival at Prince Albert he was dead, killed by a bullet fired from no one knew where, and the money was missing. How the devil could it have happened? No one had boarded the 'plane while he was at Gull Lake. No one was hidden in the cabin, yet a man had been killed and he, Phil Crossman, was logically the only person who could have committed the crime. He was in a tight corner, and he

"Well," he said, helplessly, "it may sound crazy, but I've no idea how it happened. The fellow seemed all right when he paid me his fare. There's a mystery somewhere."

"There isn't much mystery about it," Groble sneered. "I suppose you didn't know this man was wanted for stealing sixty thousand dollars? I suppose you didn't know he was carrying it around with him in that brief-case? Oh no—but you knew enough to bump him off and try and get away with it. Your yarn won't wash, young feller."

"But why should I kill him?" Phil demanded angrily. "I don't even know the man?"

"You don't need an introduction to kill a man who's carrying sixty thousand dollars with him," Groble put in pointedly.

"I tell you I know nothing about it," Phil snapped, his temper rising.

"Try and get a jury to believe that yarn," Groble grinned maliciously. "Only two men in a 'plane and one of them gets shot. He didn't do it himself, so it points obviously to the other fellow, doesn't it?"

"But the money?' Are you sure he

was carrying it?"

"It isn't likely a man would leave sixty thousand dollars behind him when he's making a get-away. He had the money in this brief-case, and now there's nothing in it but a mangy fox pelt."

The pelt was a peculiar mottled skin, neither red nor silver, badly scuffed, and quite worthless, but as Phil looked at it he had a strong impression of having seen the skin before. But where he could not for the life of him remember.

A VICIOUS gust of wind howled about the 'plane, driving stinging flakes of snow before it. Phil pulled the hood of his parka closer about him and peered outside the cabin.

There was not much he could do, he reflected. These men thought him guilty and he could hardly blame them in the circumstances. A post-mortem examination might absolve him, though it was just as likely that the result would be inconclusive. And the fact that he was innocent hardly helped if he was unable to prove it. Foster had apparently made for the north country after stealing the money. He could not have known how difficult it was to hide even in that vast expanse. A fugitive must have food, and to get it he would have to put in an appearance sometime at one or more of the numerous supply posts. In so doing he would automatically notify everyone in the district of his presence there. Strangers were too rare to pass without notice in Northern Canada.

Phil felt that, if he could conduct an investigation on his own, he might be able to solve the mystery of Foster's death, but he was also uncomfortably aware of the unspoken threat of gaol, where he would be held prisoner until a coroner's jury either freed him or ordered him to be held for trial.

"Well, have you decided to tell us how it happened?"

Groble's voice cut in on Phil's thoughts. "I've told you all I know," he retorted.

Bruce broke in.

"We'll get this corpse out of here. Sorry, but I'll have to hold you, Crossman. You were the last to see this man alive. Come on."

Foster's body was taken from the 'plane and laid on the snow-covered ground. Phil glanced at the big propeller, still ticking over. Groble caught his glance.

"Better shut that windmill off, fellow, and get ready to spend a night in gaol. You might remember where you hid that money."

Phil looked at Groble, then, without a word, he stepped close to him, knotted his fist and drove it into the leering face before him. Groble collapsed.

Lithe as a timber-wolf, Phil leaped for the wing of his machine. He flung a leg over the cockpit and dropped into his seat just as Bruce whipped a gun from his pocket.

"Come down out of there, Crossman! Don't try anything funny or I'll let you have it," the detective shouted, his finger tightening on the trigger.

Phil glanced down, saw the detective's determined face and noted just where the man stood. In a split second he made his decision. He slammed the throttle wide open.

The big Pratt & Whitney burst into a roar. Its terrific draught flung the detective's arm aside just as he pulled the trigger. A moment later he was rolling along the field, driven by the irresistible fury of the slipstream. The Junkers was moving. Phil lifted her tail and tore off into the teeth of the gale.

CHAPTER III Man-Hunt

ONCE in the air Phil began to realise the enormity of his offence. He had resisted arrest and that made him, in addition to being a murder suspect, a fugitive from justice. He would be hunted as relentlessly as trappers hunted fur.

"Phew!" he blew through his teeth, "it's a crazy world. Half-an-hour ago I was a hard-working pilot just trying to get along and now, without my doing a damned thing to warrant it, I'm an outlaw. Things sure happen fast."

They certainly did. Even as he sped north, radio messages were crackling through the frost-laden air warning all Mounted Police posts and fur traders to be on the look-out for him. He had many friends among the police, Gordon in particular, but he knew that would not prevent them from doing their duty if they were hunting him. They had a De Havilland Moth over at Sparrow Rapids. He wondered if it would be in the air searching for him. He knew it could not possibly overtake him, but it gave the police a mobility he had not reckoned with.

"I'm in one hell of a fix," he told himself. "Wish I'd told Gordon about this chap being aboard. That would have cleared me."

The possibility that his passenger was the missing cashier had never entered his head while he was chatting to Gordon. The policeman had known the fugitive was aboard the 'plane, but had decided to say nothing and let Phil take him on to Prince Albert. If he had made an arrest things might have been different. Phil reflected. The fact that he had neglected to mention his passenger to Gordon placed him in a bad light, yet he had not considered it important. never occurred to him to ask the men back at the airport how they had got their information. He knew the north country was dotted with radio sets, and the interminable void in that vast, once silent land, now vibrated with trillions of electrical impulses carrying music, news and commercial information to all who lived there. Almost every fur-trading post and most of the police stations had their miniature sending sets with just enough power to reach another post nearer civilisation, where messages could be relayed to city centres.

Black depression gripped Phil. No

matter which way he looked at the situation it was desperate, and by his simple code of life he could not see why. He knew he had not shot his passenger. and he was puzzled that the man could have been mortally wounded and yet show no sign of it. For a time he sought explanations, then gave it up as hopeless. There simply was no explanation that would make sense, at the moment. No one would believe it possible that a man could be shot and yet live long enough to make his way to a trading-post, wait until a 'plane arrived, and then board it as if nothing had happened to him. For the first time in his life Phil realised how simple it was for an innocent man to become enmeshed in a web of circumstantial evidence that would defy all efforts to get out of it.

HIS mind flitted to those tantalising acrostic puzzles which always seemed impossible to solve. He knew how simple the solution was, once the key to it was discovered. He likened his own plight to that of a puzzle. Somewhere there was a key that would unlock the mystery.

"This fellow, Foster, couldn't shoot himself and walk around Atchikan," he reasoned. "He didn't shoot himself in the 'plane, because no gun was found, and I know damned well he couldn't open the windows because I had them locked. If I try to reason this thing out quietly and forget about myself, maybe I'll find the answer."

His resolve made, he settled back to think, his thoughts accelerated by the smooth flow of power from the roaring engine ahead of him. Sudden buffets flung the Junkers over on its wing-tips, but Phil's strong hands corrected each lurch instantly. He flew automatically, immersed in thought.

"This fellow robbed a bank in Montana," he muttered, half aloud. "He made for the Canadian north, then changed his mind and wanted to get back to civilisation. Why did he come north? Why did he want to get back? Where is the money he stole, and who shot him? When I can answer those questions I'll

know the explanation. It's an odd business, but since I'm the goat I'll have to do something about it."

The next instant all thought of his predicament fled his mind. One glance at his fuel gauge and he knew that another thirty minutes' flying would dry his tanks.

Here was a complication he hadn't Petrol was necessary. northern pilot, with an eye to payloads. never carries more fuel than is absolutely necessary. Not at any time does he have more than a half-hour reserve. Phil had planned to fly out of Prince Albert to his operating base at Weetigo, but he had travelled much farther than that and his fuel was running out. He couldn't land at any of the refuelling posts in the north. The police would be waiting for He might stretch a point and trust to friendship for protection if he landed at one of the fur-traders' posts, but, on the other hand, he might be compelled to use force to escape and that would be unwise. It would create an animosity he could ill afford to rouse. No, he'd have to find some other way.

An airways map showed him there was a fuel cache at Hawk Lake, but it would be buried beneath eight or ten feet of snow and ice. He had no one to help him, and it would be a gigantic task to dig down to the steel drums below the snow. His engine would freeze while he worked. On the other hand, his fuel was almost exhausted and if he were forced down Heaven knew when he would be able to get going again. Accepting the lesser of the two evils, he swung the Junkers off towards Hawk Lake.

CHAPTER IV

The Clue of the Damaged Pelt

LUCK was with Phil when he put his skis down on Hawk Lake. Big-Nose Charlie, an Indian trapper out on his trap-lines, saw the 'plane land and turned his dog team towards the fuel cache.

"Watchi, Shimagami," he called, a wide grin on his dark face.

"Shimagami, hell," Phil smiled, climb-

ing down from the cockpit. "I'm not a policeman this time, Charlie. I'm in a hurry. Help me fill my tanks."

Stripping his webs from his feet, the Indian went to work with Phil, digging the petrol barrels from beneath the snow. As they worked, Phil related the sudden turn of events which had made him the hunted instead of the hunter. The last time he had met Big-Nose, he had been acting as a special policeman, hence the Cree term, shimagami.

"Plenty too much damn bad," the Cree agreed solemnly when Phil finished. "Man catchum shot, small hole; trapper gun, like this."

Big-Nose flipped a ·22 Colt Woodsman automatic pistol from his pocket. It was an extremely light yet powerful weapon, used by trappers to dispatch animals in the traps. Phil glanced at it, then at Charlie.

"Jove! You think it might have been a trapper who shot the fellow, eh? But which trapper? The damned country's full of them."

Big-Nose plied his snowshoe, flinging great chunks of snow from the barrels. Phil was his friend. He must help him. The fact that a man had been shot worried him not at all. Phil could shoot half a dozen men for all he cared. Death had no horrors for Charlie. The blood of proud savages flowed in his veins and death mattered little where loyalty and friendship were concerned. The Great Manitou was always especially kind to braves who died for a friend.

The skis of the Junkers were bedded in spruce boughs to prevent their freezing to the ice. The canvas hood covered the cowling, but Phil knew the engine would be cold before the time came to start, yet he could not afford to take a chance and "stick a torch" under the hood until the petrol was in the tanks. He and Charlie worked like Trojans and at last three barrels were uncovered, their plugs loosened and a rotary pump thrust into the holes.

It did not take the pair long to pump two barrels of fuel into the Junkers' empty tanks, and as Phil made his blowlamp ready he saw that Big-Nose was unhitching his dogs and thrusting them into the cabin.

"Where do you think you're going, Charlie?" Phil asked.

The Cree grinned.

"Me go with you. Mebbe me catch sign. You good bird, but no good hunter. Me no bird, but O.K. hunter."

Phil pulled a wry face as the truth of the Indian's remarks went home. Charlie was an expert trail reader. There wasn't a secret in the forest hidden from his keen eyes. He knew the meaning of every broken twig and every track, and he could almost describe the animal he was hunting by merely glancing at its tracks in the soft snow.

"But your traps, Charlie. How about them?" Phil asked, knowing the sacrifice the Indian was making in offering his services.

"We find man who shoot soon, then you bring me back here."

"O.K."

They were about to take off when Phil remembered the brief-case that still remained in the cabin. He found it, glanced at the miserable fox pelt it contained, then threw it to Charlie.

"Here, take a look at that and tell me what you think."

The Indian carefully examined the rough pelt. His keen black eyes gleamed as he ran stubby fingers through the fur. He smelled it, turned it this way and that.

"Fox one time in trap, wire trap. You know who use wire trap?"

Phil thought for a moment. The Indian's reference to snares brought a gleam of understanding to him. Many trappers used the ordinary steel-jawed trap, but of late there had been a tendency to use snares, as they held an animal tight, strangled it and thus reduced its misery and ensured an undamaged pelt. Many animals chewed their legs off to escape from the traps. One of the trappers who used snares would know something about this pelt.

"Fox one time near Trade River," Charlie offered. "Catchum clay in coat. Clay at Trade River. No other place."

Phil started. The slight traces of clay in the pelt had told the keen-eyed Indian that the fox had been caught on Trade River. There was only one point on Trade River where surface clay was evident.

"We're going places, Charlie," Phil yelled. "Larson, the Swede, is the only trapper near the clay-bank on Trade River—and he uses snares."

THERE was a joyous note to the engine as it burst into a full-throated roar. The Junkers trembled as Phil "wagged her tail" and the skis left the spruce. Tiny spirals of snow spun into the air from the slipstream. The 'plane was almost hidden by the powdery tornado as Phil jerked her into the air. Charlie sat back in the seat enjoying himself, but, as he sat there, his agile brain was working.

Phil was also doing some heavy thinking. How could Larson, the lonely Swede, be even remotely connected with Foster? Why hadn't MacKie said something about his passenger being a suspected fugitive from justice? Where was the whole crazy business leading him?

He would soon know, he told himself as, just sixty minutes later, he set his Junkers down on Trade River. Larson's shack was on a small promontory, and less than three minutes after landing Phil and Charlie were striding across the threshold.

"Ever see this pelt before, Larson?"
Phil snapped, tossing the scuffed hide before the trapper.

Larson's pale blue eyes gleamed. He fingered the worthless fur for a moment before he answered.

"Yah, ay bane catch him, but ay trade him with other culls for dog-feed."

Phil tensed. Larson had traded the pelt for fish or moose meat. Old MacKie flashed into his mind. Had the old Scotsman tired of a lonely life and suddenly yielded to temptation?

"Whom did you trade those skins to, Larson?" Phil asked quietly.

The Swede scratched his head.

"Ay trade 'em to LeBouef yust two weeks ago."

Light broke in upon Phil.

"I knew I'd seen that pelt before," he exclaimed, "and that's where I saw it, at LeBouef's. Come on, Charlie."

"There's somethink wrong, maybe,

yah?" Larson asked.

"Yah, and it isn't maybe," Phil replied. "Have you seen a strange man around LeBouef's lately, Larson?"

The Swede scratched his head again.

"No, ay ban see nobody. Ay stay at home. Ay no like LeBouef."

"There aren't many who do," Phil observed, and hurried back to his 'plane, with Charlie bringing up the rear.

CHAPTER V

The Secret of the Thunderbird

THE big Junkers climbed rapidly, and as Phil levelled off, he began thinking things over again. He had been a bit of a fool to flee from the police as he had done, but he would have been a still bigger fool to permit himself to be imprisoned on a charge that had no foundation. If he could uncover the story behind the dead cashier he would be safe. If not——. He shrugged his broad shoulders. The future must take care of itself.

His thoughts of LeBouef were not reassuring. The half-breed trapper had no very savoury reputation. It was even freely hinted that he had been chased out of another part of the country by indignant white trappers who accused him of robbing their traps.

"I wonder—" Phil began, then stopped wondering. LeBouef's cabin was

already below.

Big-Nose leaned over the edge of the cockpit as the 'plane lanced down for a landing. His keen eyes swept the snow-covered ground, and as the machine came to a stop on the river ice, Charlie grunted.

"LeBouef, he no at home. One set tracks go away from cabin. No smoke. No dogs. LeBouef, she gone."

Phil smiled at the Indian's expression, but he was thinking of his companion's other remarks. Why had the trapper gone? Was he working his trap-lines or had he gone for good?

"Maybe he's out on the lines, Charlie,"

he suggested.

"No on lines. Tracks go to Atchikan. Lines go north. LeBouef, she go to MacKie."

That would mean that the trapper was making for the civilised world. According to Charlie he had been gone for some time. His tracks were almost filled with snow, indicating that he had left about the same time that Phil was taking off from Atchikan.

Phil and the Indian walked slowly towards the little cabin set back in the spruce thickets.

As they neared the cabin, Charlie's eyes scanned the snow.

"Dog wait long time before going away. Look."

Phil glanced at the marks in the snow showing where six dogs had lain, the heat from their bodies melting the snow beneath. They had been harnessed some time before being driven away. Phil shrugged his shoulders, pushed the cabin door open, then stopped in his tracks.

"Good God!" he gasped.

Stretched on the floor lay LeBouef, a gaping hole in his forehead. One of his outflung hands grasped a ·22 calibre Colt Woodsman automatic. Phil glanced at the gun, then at LeBouef's wound.

"This gun never made that hole," he pronounced.

Big-Nose looked at the death scene calmly, noting every sign.

"LeBouef heap bad medicine. Plenty good dead. Too much damn bad not dead long time ago."

"Perhaps you're right," Phil said absently, wondering where he was to find the answer to this involved riddle.

He was still staring abstractedly at LeBouef's dead body when Charlie slipped outside. He neither saw nor heard the Indian go.

PHIL examined the sketchy evidence before him. His war experience told

him LeBouef had been shot with either a '45 Colt or a '455 Webley, and that he had been dead not more than a few hours. Who, in that country, would carry a heavy calibre revolver? Not a trapper, that was certain.

"It's the devil of a mess," he told himself for the fiftieth time, "and the farther we go, the worse it gets. Maybe I'd 've been safer in gaol, after all."

He was beginning to think that he was facing another of those inexplicable mysteries which from time to time perplex the north, when the door opened and Big-Nose stamped in. His hand gripped a '45 Colt.

"Man shoot LeBouef. Lose gun. I find it in snow near river. Plenty good. Tell Charlie how man get killed in your thunderbird."

For a moment Phil stared at Charlie in bewilderment. How could the death of Foster in an aeroplane be explained by connecting it with LeBouef's death in a cabin on Trade River? He dropped heavily into the only chair in the cabin and sighed.

"Suppose you go ahead and tell me some more," he suggested. "I'm waiting to hear something I can understand."

Big-Nose looked at LeBouef's body. He reached down and tried to pry the automatic from the dead fingers, but the death grip could not be broken. Charlie shrugged, then examined the floor.

"LeBouef shoot man who die in your thunderbird, Pheel," he said. "Man go to door, get in cariole. Dogs take him to MacKie at Atchikan. You come. Man get in your thunderbird, then he die. See?"

Phil started as though an electric needle had touched him.

"How do you know that, Charlie?"
"Dogs make plenty bad marks.
Stranger drive them. He ride. No like
LeBouef, who run behind his dogs.
Stranger ride. Stranger must be sick.
He get on thunderbird, then die. Belly
full of blood, yes."

"By Heavens!" Phil exclaimed, you've hit it, Charlie. But who shot LeBouef?"

"Man who die on thunderbird. Who else?"

Charlie's simple reasoning and his acute perception and interpretation of wood signs brought revelation to Phil. He could see now how Foster had been shot and yet had managed to live long enough to get aboard the 'plane. He could see, too, how LeBouef had met his death. He leaped from his seat and began an intensive search of the cabin.

He had not far to seek. Beneath a Hudson's Bay blanket on LeBouef's bunk he found stacks of currency—the stolen money.

"I've got it, Charlie," he exulted. "LeBouef was trying to steal the money from Foster. He'd just stuffed the fox hide in the brief case as a make-weight when Foster came in and saw him closing the case. Foster was moving on and LeBouef meant to collect the money before he went."

"Sure, that's why dogs were ready outside," Charlie agreed.

"Yes, and Foster—he'd be the one carrying a heavy gun as an outsider, you know—pulled his gun. LeBouef saw him, whipped out his own pistol and shot, but just too late. Foster's bullet hit him in the head. Foster got out to the dogs and thought he had his money still in the brief case. Yes, it all fits in—but why did Foster come up here in the first place?"

"I can tell you that," a strange voice said behind them.

PHIL whirled. Gordon and another Mounty were standing in the doorway. So engrossed was Phil that he had failed to hear a Moth 'plane land on the river.

"You see, Phil," Gordon grinned, stepping forward, "I've just learned that LeBouef was a distant relative of Foster's. The cashier had often talked of taking some money and getting away, but he was always afraid he'd be caught. He wanted a safe place to hide in, and when LeBouef moved up here he thought his chance had come."

"So he came up here. How did you find that out?"

"The Montana police learned that when they searched Foster's rooms. They found letters from LeBouef. The whole thing was planned by the trapper."

Phil's thoughts returned suddenly to

his own plight.

"Am I under arrest for breaking away?" he inquired.

Gordon laughed.

"Not that I know of. You'll get a reward for finding this money, though. I do know that."

"But the detectives at Prince Albert. What about them?"

"Oh, they forgot all about your escape when they learned that the men who were supposed to be law officers and bank examiners were crooks."

"Crooks!" Phil exclaimed.

"Yes, they'd found out where Foster had gone. They also learned you were bringing him in, so they decided to take the bull by the horns and pretend to be law officers from across the border, and grab the stolen money. If Foster had been alive they'd have taken him to a hotel and left him. They wouldn't have cared what happened to him once the money was theirs. When you skipped out you upset their plans. The real officers were at headquarters. They'd just arrived armed with proper papers. The crooks are now in gaol."

"But weren't you sending out warnings to pick me up?" Phil managed to

gasp.

"No, not to pick you up. If you had stopped at a trading post, you'd have learned that we wanted you to drop in at this cabin and take a look around. When we couldn't locate you I decided to come over here myself."

"Then I never was in any danger of

arrest?"

"No, only in danger of getting a rather handsome reward if you could find the money. Ten per cent. of the total sum is the reward offered."

"Phew!" Phil grinned. "Things happen fast, all right. One minute I'm a fugitive and the next I'm a hero. I'd better be careful from now on or I'll find myself an angel."

"Humph," Big-Nose grunted. "You never be angel. You too much trouble. Manitou no want you. Weetigo get you."

"And the devil will get you too, you old bush rat," Phil laughed happily, slapping the Indian on the back, "but not until I've dumped you back on your trap-line."

PHIL was about to walk away with Charlie when suddenly he remembered something.

"What about old MacKie?" he asked. "Did he know all about this business?"

"I suppose he did. He certainly knew Foster was the missing cashier when he put him on your 'plane."

"Then why on earth didn't the old

twister tell me?"

Constable Gordon lifted an eyebrow and grinned.

"Did you ever hear of a Scotsman giving anything away—even a crook?" he asked.

IN NEXT MONTH'S ISSUE

MENACE FROM THE SEA

Excitement runs high in this great long R.N.A.S. adventure of Zeppelin Fighters in action over the North Sea

By H. C. PARSONS

also

DEALERS IN DEATHBy A. J. PELHAM-GROOM



BORROWED TIME By Captain J. E. DOYLE

In the August

AIR STORIES

on sale July 10th

An Ace of "Strafers"

Second in the Victory List of Australia's Great Air Fighters is Captain R. King, D.S.O., D.F.C., who won lasting Fame as the "Strafing" Specialist of the Australian Flying Corps

By A. H. PRITCHARD

GREAT, but hitherto little known war-bird is, once again, the subject of an article in this series of brief biographies. This time the warbird is Captain R. King, D.S.O., D.F.C., whose nineteen victories place him second on the list of Australian air fighters who won fame as destroyers of enemy aircraft in that gallant little company, the Australian Flying Corps.

Although they never received the publicity awarded to Canadian air fighters, the Australians achieved records which are some of the most thrilling of the entire war. For sheer reckless daring, they were without equal, and no other unit ever made so many attacks on hostile aerodromes as did Nos. 2 and 4 Squadrons of the A.F.C. In many of these attacks King excelled, and even if he had not destroyed a single enemy machine, he would have been worthy of a place here, if only for his "strafing" exploits.

Born at Bathurst, New South Wales, on May 13th, 1894, King had a mania for engines of all shapes and sizes, and was so skilful a mechanic that, on the outbreak of war, he was a full-blown



Captain R. King—A sketch from a war-time photograph

motor engineer and salesman, with a flourishing business at Forbes. common with so many other gallant youngsters from the great "Never-Never " land, the call to arms was the dawn of a great adventure, and, sacrificing a very promising and comfortable career, King downed tools and joined At this period Australia had no mechanical units, and so we find him with the Australian Light Horse wherein he saw considerable service. The love of engines remained with him, however, and the formation of the Australian Flying Corps was a chance upon which he did not fail to seize. His application for a transfer was passed through in record time.

Many of the Australians were trained at Castle Bromwich aerodrome, Birmingham, and only two days after his arrival there, King witnessed an accident that must have shaken even the strongest nerves. Two machines collided with such force that one pilot was decapitated, his head and shoulders falling into the grounds of the Dunlop Works' canteen and his legs over two hundred yards

away. By some curious freak of chance, the unfortunate pilot's safety belt was picked up unopened and undamaged. Several other bad accidents were recorded about this time, but King managed to keep a clean log and was duly posted to No. 4 Squadron, at Rockingham, and left to the evils of a Sopwith Camel.

Twenty Fights in Two Weeks

THERE was no careful nursing of the new pilot in those days, for with enemy aircraft constantly on the prowl, every pilot had to fight or die. Within two weeks of his arrival, King had been in over twenty dog-fights without even registering an "out of control." On May 4th, however, his chance came when front-line observers reported that two L.V.G.'s were directing a heavy German battery on Ballieul and would the Australians please do something about it?

They would and did, and in company with Captain G. F. Malley, King attacked the enemy observation machines and sent one down as his first offering to the War Gods. Every Australian pilot seems to have had a tilt with the Estaires balloon line at some time or other, and King was no exception, and on June 20th his guns accounted for one of its balloons.

Although his victories were not mounting with any startling speed, it soon became apparent that King had a natural flair for leading patrols, and he led patrols of more experienced men within six weeks of his arrival at the Front. He destroyed an L.V.G. on June 28th, and on the following evening led a formation of thirteen Camels against the enemy aerodrome at Comines. well planned was his attack that not a single enemy machine took-off to offer fight, and King had passed on and destroyed a nearby supply dump before a German machine had even been wheeled out of its bullet-riddled hangar.

King's next victory was over an armoured L.V.G. infantry-contact machine, and after watching his victim crash on the roof of a house, he "shot

up" a flaming onion battery. Four days later, July 29th, he was ordered to lead six machines as escort for a party of D.H.9's from No. 103 Squadron that was to bomb Armentières. Directly over the town the bombers were attacked by ten Fokker D.7's and King led his men to the attack. Despite the unexpected arrival of another nine D.7's, the Australians won the day, and Trescowthick, Baker, and two of the D.H.9 observers secured victories.

Early in August, the Imperial German Air Service began to use a great number of armoured L.V.G.'s for ground "strafing" purposes and King appears to have chosen these for his special attention, destroying one near Merville on August 3rd and another on the following evening.

Returning from a bombing raid on the 10th, he set fire to one of the Estaires balloons, and was attacked by one of his old friends, whose observer riddled his main petrol tank. With complete disregard for the danger of fire, King turned, and a burst from his guns smashed the L.V.G.'s propeller and passed on through both pilot and observer. Switching on to his reserve tank, King managed to return home, and eventually landed just as his engine failed.

Hunting in the Dark

WITH the enemy now on the run, the Australians began to indulge in escapades that caused their commander's hair to stand on end, and as "scroungers" they had no equals. On one occasion King and two companions returned from a foraging expedition proudly leading a cow and two calves. Not to be outdone, other pilots scoured the countryside for other portable livestock, and it was not long before the squadron had an almost complete farmyard.

Despite these diversions, however, they never fell down on a job, and when not engaged in routine work, would stage a kind of guerilla war of their own. King often joined forces with Captain Cobby in making dusk raids on enemy

aerodromes, and they played no small part in forcing the enemy to evacuate advance landing-grounds. favourite trick of theirs was to take-off in the mists of late evening and catch the enemy just when his machines were being tucked away for the night. Down would go their bombs, and Germany had to cross off a hangar or a few machines from her list of effective war materials. They also played the same game with observation balloons, bombing them when bedded down for the night, and although they were never counted as victories, the intrepid pair destroyed over a dozen in this manner.

These shock tactics proved so successful that a mass raid on Haubourdin was ordered for August 16th, no less than sixty-five machines taking part. On the following day the formation visited Lomme, whereon was stationed the old Boelke Staffel. In this raid King did particularly well, setting fire to a hangar, shooting up a petrol store and searchlight port, and generally playing havoc.

A D.F.W. two-seater near Laventie on August 30th, and a balloon on September 1st, brought his score to ten, and a well-earned D.F.C. was his reward. September 4th proved to be a very busy day, and two more enemy machines fell to his guns. While on an early patrol he spotted fourteen Fokker D.7's attacking eight Bristol Fighters and down he went to help. A yellow and black scout went down in flames, and the British formation then chased the rest home, but not before five more had fallen to the Fighters.

That same evening he and Cobby attacked a train so successfully that it was blown off the lines and totally destroyed. Leaving his companion to "strafe" a salvage party, King caught up with an L.V.G. west of Haubourdin. His second burst caught the German observer in the stomach, severing his safety belt and, as the pilot half rolled to escape, the dead man fell from the machine, the pilot following a few seconds later, strapped inside a flaming coffin. Two days later a black Fokker

KING'S VICTORY LOG

- I Pfalz D.12
- 7 Fokker D.7's
- 6 L.V.G.'s
- I D.F.W.
- I Rumpler C.5
- 3 Balloons

D.7 went down near Lille after King had shot its wings off.

Snipes Replace Camels

TOWARDS the end of September, No. 4 Squadron was re-equipped with the new Sopwith Snipe, and on October 28th King's flight attacked seven Fokkers over Ath and shot down four of them. King claimed the enemy leader, while Lieutenant A. J. Palliser accounted for two more, and Major W. A. McCloughry, who had seen the fight from afar, came up and destroyed another.

The Australians were now doing considerable execution to the much vaunted Fokker, and on the very next day the whole squadron took-off and destroyed a dozen of them. During one fight King lost contact with his men in a cloud-chasing bout and was at once pounced upon by five of the thick-The clouds that had winged killers. placed him in this tight spot now came to King's aid, and he managed to escape by a terrific dive. Coming out from his misty sanctuary, he spotted an L.V.G. directly below him, and the unfortunate two-seater caught the full force of a fifty-round burst.

On October 30th, King took part in another massed raid on a German aerodrome. This time the objective was Leuze, where five hangars and eleven machines went up in a storm of flame and steel, and no less than thirty-one enemy aircraft were destroyed during the resultant dog-fight. German machines swarmed everywhere, and King sent a Pfalz down "out of control" early in the battle. Zooming up to

pick off a Fokker that was busily shooting holes in a D.H.9, he put a long burst through the floorboards beneath the cockpit and the pilotless machine veered crazily and smashed into another Fokker. Locked together, the doomed machines started earthwards in a remarkably slow "falling leaf," then flames found the petrol tanks, and the whole lot disentegrated in mid-air, the wreckage falling all around the embattled machines.

November found the enemy in panicstricken retreat and King was in the air from dawn to dusk, bombing and machine-gunning the demoralised enemy troops. In common with many other aces, King's last entry in his victory log came on November 4th, when he brought down two more Fokkers during a raid on Wattines. His flight engaged twelve enemy scouts, and King soon had the leader going down in flames. Seeing another Snipe in hot water, he flew within two yards of its attacker and that, too, went down, a flame-enshrouded wreck.

Enemy air opposition was now almost nil and his hangars were bombed daily. On the 9th, all the hangars were destroyed at Enghien, and King shot up a road that was jammed tight with transport lorries and field guns. It was on this "strafe" that he came near to an inglorious end, for some infantrymen, braver than their companions, broke out a machine-gun and put over sixty bullets through his Snipe. One shot the control stick clean out of his hand and he had to fly home bent over about four inches of his shattered control. He was up again next morning, however, and continued his "strafing" exploits.

An Australian Farewell

Early on the morning of November Lith, orders were issued to the effect that offensive patrols should be called off pending an Armistice that was due to begin at II a.m. King and many of his comrades disregarded the orders, however, and took-off loaded to the limit with bullets and bombs. When questioned on their return, long after mid-day, they explained that they had merely been to have a last look at the war. They had, in more ways than one, for it was noted that their belts and bomb-racks were empty.

With the cessation of hostilities, King returned to Australia and so passed out of sight of air historians. So long as Australia possesses an Air Force, however, she will surely remember this valiant "runner-up" in her heroic band of aces.

HERE'S THE ANSWER

Readers' Questions are invited and should be addressed to AIR STORIES, Tower House, Southampton Street, London, W.C.2. A stamped, addressed envelope must accompany ALL enquiries.

MANNOCK'S INSIGNIA (A. O. Humphreys, Liverpool, 11). The S.E.5 used by Mannock in 40 Squadron was a greenish fawn in colour, though other aircraft in the squadron ranged in hue from grey to almost buff. His fuselage bore the letter "M" in white and three encircling bands of white. For details, see the Nieuports in Drigin's illustrations to "Fighter Pilot" in this issue.

MAXIM GORKY (A. E. Bacon, Southall, Middlesex). "Maxim Gorky" was the name given to the first of the Russian A.N.T. 20 monoplanes completed in 1934 and destroyed, with heavy loss of life, the following year in a mid-air collision. Designed for propaganda purposes, it included among its equipment a printing press, a photographic laboratory, a radio set, loud-speakers for broadcasting from the air, a travelling cinema, and an electrical installation for the display of slogans in light bulbs on the underside of the wings. Driven by eight 750 h.p. engines, it had a top speed

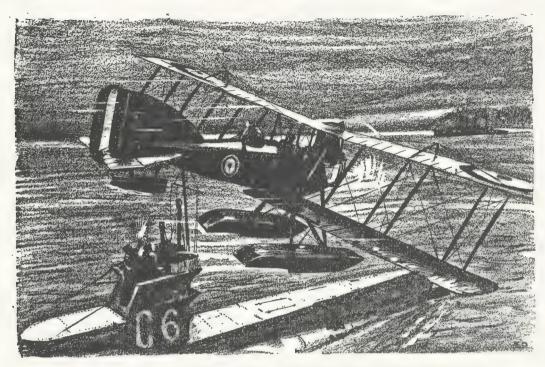
of 144 m.p.h. Sixteen further A.N.T. 20's are now being built, but these will be fitted with six 1,200 h.p. engines and will have a top speed of 170 m.p.h. Each will accommodate sixty to seventy passengers and with an all-up weight of 38 tons, will be the largest land aeroplanes in the world.

FAIREY FEROCE (Gerard McRory, Belfast).
(1) For model-building purposes the Feroce is identical with the Fantôme except that it has the more powerful 12-Y type of Hispano-Suiza engine.
(2) The Fairey Fox, as used by the Belgian Air Force, has an 860-h.p. Hispano-Suiza and does 227 m.p.h. at 4,000 ft. (3) No details of the new Fairey Monofox have yet been released.

VICTORY SCORES (P. R. Langham, Edg-baston). Here are the victory scores of the British airmen you list: C. M. Crowe, 10; R. Kay, 2; A. P. F. Rhys-Davids, 18; A. T. C. Hoidge, 14; W. R. Barker, 53; G. E. H. McElroy, 46; W. Leefe Robinson, r airship.

(More Replies to Readers on p. 92)

SUBMARINE SOLO



"Let's have another look at her," Speed shouted, and sent the Short hurtling low across the submarine

An Exciting Story of the Royal Naval Air Service By JEREMY HOOD

RICHARD SPEED, R.N.A.S., looked out of the mess window with the concentrated fixity of one who was mentally computing drift while flying through a whirlwind. Before him stretched the overgrown lawns of the country mansion that had been taken over to house the officers of the Coastal Defence Flight at Bembridge, the little Isle of Wight seaplane station.

In the distance, abundant trees strained towards a cloud-flecked sky. Here and there stood neglected pergolas festooned with dead ramblers. Near the house, gardens, in which weeds had replaced flowers, formed a dark pattern. In spite of the general appearance of

neglect, the view was homely and peaceful. One needed to step out of the stately front door and walk a little way towards the beach before the sight of the Short seaplanes at their moorings, the warships in their anchorage, and the boom ships away out in the fairway brought a grim reminder of war and the ever present danger that threatened England's shores.

The U-boat had become a serious menace. The loss of a few million tons of shipping was not in itself calamitous, and a few shells on East Coast resorts could be borne with. But this new liaison between the world's greatest spy system and the German submarine service was threatening to starve Britain. Food-

ships were going down with promptness and dispatch, and neither change of route nor change of craft could avert disaster. Jerry knew, and Jerry acted.

Something had to be done about it. The Navy were given more and more small ships, which went to sea loaded with explosives amounting to twice their own weight. Larger ships prowled unceasingly on the look-out for these raiders of the deep. The R.N.A.S. did more and more patrols in anything and everything that could be got into the air. They even had their balloons towed about at sea.

In addition, one or two experienced sea patrol fliers had been borrowed from Dunkirk to strengthen the air eye, men who knew what a U-boat looked like from the air.

SPEED was one of these U-boat specialists. His welcome was a warm one, in keeping with his record. The very junior men awaited his active service yarns with keen anticipation; senior officers were anxious to discuss tactics and armament, contemporaries pushed the wine hatch open.

But Speed did not respond as they expected. He seemed a little distrait, even absent-minded. It almost looked as if he were sorry to have left the inferno across the Channel.

The mess soon realised that Speed was a curious bird. He was pleasant enough and an extraordinarily good pilot, but he always gave the impression that he was suffering from some deep-rooted grievance.

Squadron Commander Hewlett discussed the matter on one occasion with the Wing Commander during a visit of inspection.

"Can't get near him," he explained.
"He never lets up. He stares out of the window or else wanders about the grounds. Queer cuss."

"Nerves?"

"Not a sign of 'em. Doc. says he's A.I."

"Is his promotion late?"

"Not due by a long chalk."

"Does he want leave?"

"He hasn't said so. He had some before joining us. I gave him last week-end, and he didn't go away. He just poked about the gardens."

The Wing Commander shrugged his shoulders and went on to deal with other

matters.

A similar sort of reaction occurred in mess. Speed was invited to join singsongs and "shore" parties, but he showed little interest in them, wet or dry. So the mess also shrugged its shoulders.

Only one member of it knew anything of Speed, and that was Dellow, the observer officer who shared his patrols. Dellow was a full-blown two-ringer, whose hoary thirty-three years made him an ancient among the pink-cheeked subs. with whom he lived.

Dellow, of course, had more opportunity than the others to get to know Speed. One cannot spend hours in the air with a fellow upon whom one's life depends without knowing something about him. Yet Dellow made no attempt to draw out the young pilot, with the inevitable result that he came to know quite a lot.

He knew that Speed was really keen and efficient, for all his air of torpor. He knew also that the pilot was as sensitive as a kitten. He would never have dared to ask what was bothering him. Yet he was to know that, too, soon enough.

THE Short taxied out into the bay with sundry coughs from her curious engine, reputed to be of a type designed for motor-boats. As the seaplane rode the gentle sea, the wings appeared to bend in the middle of their huge span, and the angular tail threatened at any moment to shoot off into the sky by itself.

A cloud of spray leaped from the floats and was flung aft in the slipstream. Speed smiled as he wiped his goggles. He looked back at Dellow, who was similarly engaged.

"She'd do better under the water," he shouted, "than over it."

Dellow described the 'plane with a

SUBMARINE SOLO

brief epithet hardly becoming an officer "She'd make a and a gentleman. grand greenhouse," he added. "Just right for my tomatoes."

A curious look of surprise appeared on Speed's face. He opened his mouth to speak, but frowned instead and turned to concern himself once more with his course.

The take-off was typical of the machine when there was little wind about. She came unstuck in her own time, and gambolled along joyously while making up her mind. But at last the great cloud of spray about the 'plane diminished to two fine white furrows trailing behind the floats, and the next instant the Short heaved herself into the air.

Almost at once they picked up the Nab lightship and a little later, still low down, sighted the Dean. They made height as they headed east, and the busy area of water which led to Portsmouth Naval Base spread out beneath them.

An M.L.* was carving a white path across the northern minefield towards an incoming convoy which looked as if it might drift off the fairway. small craft of shallow draught patrolled over the minefield itself, ready to head off any friendly vessel which did not know her way about.

A battleship sauntered grandly down Southampton Water, outward bound. Dellow bent forward to speak into the mouthpiece of his Gosport tube.

"The old Gin Palace † is off again," "She doesn't get long in he called. nowadays."

Speed nodded. He looked down at a flotilla of destroyers heading into port, well ahead of their convoy.

"Those lads are in a hurry," he "There's plenty of time yet shouted. for Jerry to plant a few torpedoes among the chickens."

"I expect they saw the M.L.'s," Dellow replied, "and us. I don't think Jerry would come in as near as that to the minefields."

† Disrespectful nickname for H.M.S. "Agin-

Speed laughed.

"They know where they are just as well as we do," he said. "Better, sometimes."

They made the Dean Lightship and banked over to the south for the long leg of their triangle. Away on their port side the sun was sinking behind a vague purple horizon. To starboard the convoy was passing between the guard vessel in the middle of the boom. "Agincourt" had turned instead of heading straight out to sea, and had dropped her hook in Sandown Bay, apparently awaiting instructions.

By the time the Short had turned again to the north-east to complete the first round of the patrol, the waters below had cleared except for a drifter. heading round to relieve a sister off the Needles, and the ever present M.L., squatting over the mines.

The light began to fade as the old Short lumbered round her area for the second time. A slight evening breeze had sprung up, and the surface of the water was shaded with little delicate ripples which reduced the sea to its proper perspective.

The M.L. moved away to her night station off the Dean. Ten miles or so to the south another M.L. lay hove-to, while experts listened at hydrophone earphones for the whine of submarine engines working below the surface.

Dusk had settled upon the east when suddenly Dellow called his pilot.

"Submarine awash behind us!" he shouted.

SPEED looked back and saw, amid a white froth, a black conning-tower and short length of narrow glistening deck. The vessel was steaming towards the harbour on her surface engines. As the Short turned to pass over the submarine, a Morse lamp blinked from the look-out station high up on Culver Cliff.

"CQ-CQ-CQ-" came the challenge. The code answer for the night was 4T. But it did not come from the submarine. Instead, its signaller replied:

"Submarine C.6 returning for repairs. Light-

^{*} M.L. = Motor Launch, a small, fast naval craft, lightly armed and carrying depth-charges for anti-submarine work.

ing system and wireless out of order. Please

The Morse was clear for all to see, and so was the submarine, as it steamed unerringly along the zig-zag fairway between the minefields. Dusk was ap-Ashore, lights proaching fast, now. gleamed wanly against a dark background. Speed banked again and put the Short's nose down to pass across the submarine. They could see an officer on the conning-tower top, and beside him the coxswain. The Short thundered overhead. In the dusk its exhaust glowed dully red, and yellowish flame flickered from the end of it.

"I say, Dellow," came Speed's voice in the 'phones, "did you say you grew tomatoes?"

"I did. And shall again . . . sometime. Why?"

"You mentioned a greenhouse as we were taking-off. Remind me to tell you something when we get back. It'll interest you."

"Sure. What's it about?"

"Well, it's—Hello! Something odd going on down there!"

There was. The submarine, having cleared the minefields, was now steaming along the side of the boom away from the entrance.

"It looks as if the boom is open, too," commented Dellow.

Speed shouted: "Let's have another look at her!"

He banked over sharply and headed down towards the submarine, passing only a few feet above her. As the Short hurtled on, Speed saw ahead of him in Sandown Bay the dim bulk of H.M.S. "Agincourt," with lights gleaming from her ports. Supposing the submarine was a U-boat after all—why, the "Agincourt" would be at her mercy in a few seconds! Fantastic, of course, but possible.

"Don't like the look of this," Speed called. "What's the blighter going into Sandown for, instead of into port? Challenge him, Dellow!"

As they circled round, Dellow turned his hand Morse lamp upon the submarine.

"CQ-CQ-CQ" it winked. There was no answer. Again and again he sent the official challenge, but without reply. According to Admiralty orders, they were now entitled to fire.

"Heave-to. Heave-to," signalled Dellow, "or we'll bomb you !"

An answering message came now.

"Our main motors and electric system broken down. Culver advised."

"Answer challenge—CQ," the seaplane flashed back.

There was no response to this. "Answer challenge," Dellow repeated, "or we bomb you!"

"Do not know current reply. Too long at sea," came the answer.

"What now?" Dellow shouted into the mouthpiece.

"Tell him to heave-to. Tell him this is his last warning."

The Morse lamp flickered its message. The submarine, now only visible by the wash about its superstructure, slowed up.

"He's stopping !" shouted Dellow.

"So are we," roared Speed. "Hold tight."

THE old engine coughed as the throttle was closed. The floats smacked upon the water and cut deeply into the choppy seas. Porpoising hectically, the Short pulled up astern of the submarine. Speed taxied round to her starboard side, and throttled down to a tick-over.

"What the Hades do you think you're doing?" came an enraged query from the submarine.

"Carrying out Admiralty orders," replied Dellow. "We were entitled to fire on you."

"I know! I know! But I explained everything once."

Dellow was silent. If the submarine's wireless was out of action it would be impossible to acquaint them with the change of challenge and reply.

"How long have you been at sea?"

"Eight days."

Speed chipped in here.

"Why didn't you go into harbour?"

"If you must know, it was because I was afraid my fuel would give out, and

I didn't want to have to anchor in the fairway without lights. So I decided to drop my hook in Sandown Bay. Now, are you satisfied?"

Nothing could have been more correct. Dellow had observed the "C.6" painted clearly on the side of the conning-tower. His voice was placatory when next he spoke.

"Sorry to put the breeze up you, old man. Had to be done. The old Gin

Palace is in the bay."

"So I see. Well, we'll be getting along."

"Half a mo'," shouted Speed. Could we have a look at your papers?"

"Go to blazes!" came the reply. "Who the ringing bell do you think you are? I'm going on, and if you damage us I warn you you'll be for it!"

The Dean M.L. nosed up in the dusk and cavorted neatly round the submarine's stern.

"What's adrift?" came a hail from her bridge.

Dellow leaned over towards Speed.

"Watch your step, old lad," he warned him quietly. "This sub's obviously one of our own."

Speed stood on his seat. "I'm not satisfied," he snapped. He cupped his hands about his mouth.

"Get your gun and depth charges ready!" he shouted to the commander of the M.L. "You in the submarine, there! I want to see your papers."

The M.L. hove-to, bows on to the submarine. Two hands stood by the three-pounder gun for'ard. Another was posted by the depth charges aft. From the submarine came a howl of rage.

"You shall see them, you confounded idiot! But just wait until I get ashore! You and your precious Harry Tate gang won't look quite so smart, then!"

The submarine's rubber boat was inflated and dumped into the water. A rating seated himself in it. Speed, torch in hand and a revolver in his pocket, carefully climbed down on to a float. He switched on the light as the small vessel approached.

"Keep your oars clear of the float!" he warned.

The seaman pulled alongside carefully and shipped his oars. He passed over a log and lead-bound code book. Speed examined the log, noting that there had been no entries for a week. He tried to read the signature of the Commanding Officer, but could not make certain of it.

"What's your captain's name?" he asked the hand, shining his torch full on him. On the man's hat-band the gold lettering "H.M. Submarine C.6," gleamed dully. The seaman looked puzzled.

"Pardon?" he said. Speed nearly gasped at the word. It was as if a deferential foreign diplomat had failed to catch the query of visiting Royalty.

"What's your C.O. s name?" Speed repeated.

The man, still obviously puzzled, made no reply. Speed bent down to examine him more closely. He noted a flat face and very close-cropped hair. On one of the man's fingers was a ring. Suspicion grew to conviction.

"Look here—" he started, but his words were cut off dramatically. The man grasped an oar and jerked the heavy end of it into Speed's jaw, and the pilot fell backwards, hands upraised.

The icy chill of the water quickly restored Speed's dazed senses, and when he came to the surface, he saw the seaman pulling frenziedly back towards the submarine, twenty yards away.

As Speed struck out powerfully after the boat he heard shouts. He recognised Dellow's voice hailing the M.L. From the submarine came a cry of fear. He gritted his teeth and put all he knew into his strokes.

He was only a few yards behind the rubber boat as it plunged against the side of the submarine, which was already moving. The seaman leaped upon the narrow deck, abandoning boat and oars. Speed got a grip on a stanchion, lying flush with the deck.

The seaman was already at the top of the steps leading to the conning-tower. A shaft of light from the interior struck his face, revealing an open mouth and staring eyes. Hurriedly, he began to drop down the ladder into the submarine.

Speed hurled himself up the iron steps. He saw an arm reach upwards to haul down the hatch. He pulled out his revolver, and as the round iron cover descended, he thrust the metal barrel between cover and seating.

The cover clanged upon the revolver and remained just open. A thin crack of light showed round the edge. The submarine was under way now, with the M.L. steaming close alongside.

"Fire!" roared Speed, "or drop a charge!"

"What about you?" came back from the M.L.

Speed spat a raging oath.

"Got to stop him somehow—get a move on, for the love of Mike!"

Speed felt pressure on the revolver barrel. He grasped the handle with both hands and pushed back.

Suddenly the hatch opened, and in the sudden blaze of light Speed saw the man who had abandoned his boat, and now he held an automatic in his hand. Without moving the revolver, Speed pulled the trigger, praying that the water had not had time to damage the ammunition.

Bang 1

The man disappeared, and the hatch clanged hollowly as it fell once more upon the revolver barrel. Speed mounted the little deck and heaved the hatch open. He stood, revolver ready, looking down into the brightly lit interior. At the bottom of the iron ladder the seaman lay motionless.

Then came a shattering roar, and Speed felt the submarine heave under him. The M.L. had dropped a shallow-timed depth charge as near as it could to the stern.

Speed's ears sang, and he swayed a little as the submarine rocked. He became aware of a sudden violent vibration beneath his feet. A vibration that rose to a crescendo and then abruptly ceased. The depth charge had buckled the submarine aft, and the propeller shafts snapped, the engines had raced madly until someone below

had the presence of mind to stop them.

Speed gave a great shout of triumph.

"She's done for !" he yelled. "Now, you blighters," he shouted into the tower, "come up and take your medicine!"

THERE was no movement below. Slowly the submarine lost way. The M.L. edged alongside, her deckhands using boat-hooks and fend-offs to keep her from knocking on the bulging side of the half-submerged submarine. An R.N.V.R. officer leaped to the deck of the submarine and joined Speed. The pilot bent down, so that his voice would carry into the submarine.

"Below there!" he shouted. "You'd better come up. Don't want to send you

all to the bottom!"

The head of an officer appeared below, peering upwards.

"We'll come," he cried. "Congratulations."

The wounded man was heaved to one side and the officer climbed up on to the little deck. He was smiling.

"We nearly succeeded," he said calmly, and looked longingly at the "Agincourt," now recognisable in the darkness only by her wide-spread array of lights. "We might have got her from here," he added plaintively. "Wish I'd had a shot at it."

Speed regarded him in amazement.

"Your English's very good," he said. "How's that?"

"It ought to be," was the retort.
"I did a course at your Naval College before the war. And I've often visited England since."

" As a civilian?"

" Of course."

"And what about the C.6?" Speed demanded. "Where is she really?"

The German smiled broadly.

"Not far away," he said. "You're standing on her."

"What?" gasped Speed and the R.N.V.R. officer in unison.

"We found her in one of our nets. Her skipper and crew are all prisoners."

"Well, I'm jiggered! And you-"

SUBMARINE SOLO

"Repaired her engines and steamed through your little fleet."

Speed laughed.

"Great stunt! Perhaps you can tell us more about it later on," he said. "Meanwhile, do you mind instructing your blokes to get aboard the M.L.?"

The officer shouted gutteral orders below, and as the submarine crew began to climb the iron ladder, Speed warned him.

"You're not going to try any funny business, I hope? I mean—we don't want any bother or someone's likely to get badly hurt."

"We accept our defeat," replied the officer, and as his men filed past he spoke to them sharply. One by one they clambered aboard the M.L. Finally, the injured man was brought up on deck and passed across to the little vessel. The officer counted his men.

"All present I" he announced.

"Right," Speed acknowledged. "Join your crew, please."

The officer left the conning-tower, and Speed turned to the R.N.V.R. man.

"Get a tow rope aboard, old son," he said. "We'll take the tub into Pompey." *

The rope was soon made fast, and the M.L. began her arduous tow back along the boom. Culver Cliff was advised of the situation and the boom guardships informed by telephone. As the vessels approached the entrance, the boom was opened to let them through.

IT was as the M.L. was nearing the narrow entrance to the harbour that Speed, standing in the conning-tower at the helm of the submarine, heard the German officer hailing him from the stern of the M.L.

"Do you need any help to get into harbour?" he shouted.

"No, thanks," Speed replied. "She's handling nicely enough."

The officer remained at the stern, gazing back at the submarine. The two vessels slid slowly into the calm waters of the harbour. On the left

The M.L.'s engine slowed down, and presently Speed heard the German's voice again.

"Can you hear me?" was the shouted guery.

"Yes," replied Speed. "What's the matter?"

"I think you'd better examine the tow rope. You're using an old hawser of ours, and it'd be awkward if you broke adrift here."

Speed pondered this unexpected solicitude, and the more he did so the more curious it seemed. Why should the German commander care a hoot whether the submarine broke adrift or not? What was his purpose? And why did he remain persistently at the stern of the M.L.?

Inspiration came to Speed.

"Can you hear me?" he shouted.

"Very well," came the German's reply.

"I think your suggestion's a good un. Ask your skipper to heave-to while I take a look at the tow-rope."

The German moved away, and presently the harsh note of the M.L.'s engine ceased. The submarine kept on for a minute or two and Speed mancuvred her so that she pointed at quay walls fore and aft.

Swiftly, he went down the iron ladder into the interior of the submarine and hastened for ard through the battery chambers, past the magazine, through the men's mess until he came to the forward bulkhead with its massive door and clamps, now unfastened.

He heaved the door back, and there, standing by the torpedo-tube breeches, ready to fire, stood a startled seaman. Speed displayed his revolver significantly.

"Hop it!" he jerked out, and his gesture was plain enough for anyone, whatever their nationality. The man seemed to shrink. The fire which had animated him was quenched and he

was the C.M.B. base, a little farther on H.M.S. "Victory" lay at her moorings, and on the right a flotilla of destroyers lay in line abreast. In the distance, every conceivable kind of warship lay alongside the numerous quays.

[&]quot;Pompey." = Naval slang for Portsmouth.

stumbled sulkily aft. Speed escorted him on to the deck and saw him transferred to the M.L.

His second excursion to the after torpedo tubes produced yet another captive. Speed's intuition had proved correct. As soon as the submarine had gained the crowded docks, which were lined with warships, the German would have chosen his moment to yell "Fire!" with the full power of his lungs. Then four torpedoes, or more, would have been launched from fore and aft.

A quarter of an hour later the submarine was moored beside an inner quay, and the German crew and officers had been taken to the Naval Barracks for interrogation. The M.L., with Speedaboard, was moving slowly back through the harbour.

"Shall I drop you at Bembridge?" asked the R.N.V.R. two-ringer.

"Not yet," replied Speed. "I think I'd better go and collect the Short, if she's still afloat."

The M.L. skipper started. "Gosh!" he exclaimed. "I'd clean forgotten all about the 'plane."

The old Short was still afloat, and a fuming Dellow was still in the after cockpit. The 'plane was taken in tow, and the M.L. headed back for Bembridge. Down in the snug little wardroom Dellow thawed gradually. Presently he said:

"Well, what happened?"

"We got her in all right," replied Speed. Then, with hardly a pause, he added: "I say, you remember I was going to tell you something? Well——"

THE following is a reproduction of a letter written by Lieutenant Richard Speed, D.S.O., R.N.A.S., a little later. It was addressed to "R. M. Speed, Esq., Falswell Market Gardens, Norfolk," and it ran:

" Dear Dad,

"Everything's worked out all right, after all. You remember how fed up I was about leaving my plot and the greenhouses at Dunkirk? Well, now I've got an enormous garden here and plenty of help to run it. The Admiral came over to say some nice things about the submarine show, and when he'd finished I asked if I could take charge of the garden. He agreed, and now I get all the C.B.'s * and fatigue men, and the place is coming on wonderfully.

"Incidentally, I discovered quite by chance that my observer, Dellow, is keen on gardening, too. He's lending a hand. Could you let me have some of your special tomato plants for the

greenhouse ?

Love to all, DICK."

"P.S.—They gave me the D.S.O. and promotion. Oh, and some of those cucumber plants, too, please."

* C.B's. = Men confined to barracks for infringements of discipline.

"AIR STORIES" CORRESPONDENCE CLUB A Free Service for Readers

IN response to the requests of many readers wishing to be put into touch with correspondents interested in Aviation, the following service has been introduced and is available to all readers of AIR STORIES. There is no charge made and the procedure, described below, is quite simple:

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self-addressed envelope. If you have any special wishes regarding the correspondent you want, such as whether he should be resident in the British Isles or some particular Dominion, or interested in some particular hobby, mention these facts in a separate note accompanying your letter.

From the letters at our disposal, we then select one from a reader whose age and interests are in common with your own and send it to you, at the same time forwarding your own letter to this particular reader. If there is no suitable correspondent waiting at the time of receiving your letter, we will retain it until one is available.

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envelope.

All letters should be addressed to "Correspondent," AIR STORIES, Tower House, Southampton Street, Strand, London, W.C.2.

AIR BOOKS

Reviews of the Latest Books on Aviation

PACIFIC ADVENTURE

"Pacific Flight": By P. G. Taylor: John Hamilton: 8s. 6d. net.

UITE suddenly, Kingsford Smith took up the atlas. 'Let's have a look at the South Pacific,'

. . . We turned up the page, 102. I had often studied it, measured distances and worked out fuel consumptions and ranges in my own copy.

There was no need for preliminaries. Smithy

'We could do it all right in the Altair; how about it?

It was something I had intended to do some day; so that was that."

In this casual manner, P. G. Taylor records, did Kingsford Smith and he decide to set out in a single-engined aeroplane on a flight across 7,300 miles of ocean from Brisbane to San Francisco.

Their American machine, a two-seater Lock-heed Altair monoplane, had been acquired to compete in the Mildenhall-Melbourne Centenary Air Race, but delay in securing the necessary airworthiness certificates and trouble with a split cowling put them out of the running at the last moment. Taylor tabulates a number of excellent reasons why a trans-Pacific flight seemed to them the best alternative, but the most powerful motive of all, one suspects, was "And besides, we wanted to fly the Pacific Ocean."

And, as history now records, fly it they did, completing a 7,300 miles' journey in three non-stop "hops," the shortest of which, from Brisbane to the Fiji Isles, was 1,780 miles and the longest, Fiji to Honolulu, 3,150 miles. It was an amazing achievement, and "Pacific Flight" is the stirring story of the trip from start to finish, told with simplicity and directness by the man responsible for the brilliant navigation to which the success

of the flight was so largely due.

A long-distance oversea flight might seem a dull subject upon which to base a book, and it is high tribute to the author's literary ability that " Pacific Flight," apart from being a detailed record of one of the greatest feats in aviation, is also a narrative of enthralling interest. No one could more vividly convey the agony of suspense that attends a faltering engine in mid-ocean, or the boundless joy of sighting an objective after 3,000 miles flying out of sight of land, than does Taylor in a few brief but infinitely expressive sentences.

Three times disaster nearly overtook them, once in the air when a cylinder cut out while they were 500 miles from the nearest land, and again when, in taking-off across wind from a beach in Fiji, the overloaded machine took charge and in the space of ten seconds was twice saved from total destruction by the instantaneous action of Kingsford Smith at the controls. The third narrow escape was, perhaps, the most alarming of all, and there can be few more dramatic passages in aeronautical literature than Taylor's description of how their machine, losing speed for no apparent reason, suddenly got into a spin at night, 10,000 feet above the water in mid-Pacific.

"We cannot see what is happening," he writes. "There is nothing to see. She goes-

"I feel that I have been thrown upwards without the machine; then back unnaturally in the seat. The whole world is waving about and there is a tightness in my head. The engine stops. Smithy has shut off. Immediately there is a scream from the klaxon that warns about the undercarriage when the throttle is shut. All round us there is the whirling sound of the shrieking klaxon as though it were violently swung on the end of a string, and the tight feeling and flinging of the machine. Spinning. It is a fantastic whirling madness in the centre of black infinity. The turn-indicator handle is hard over, and the altimeter needle is winding its way round the dial. I can feel Smithy all out on the controls. Nothing happens but the futile screech of the klaxon and the even swing of the machine. She does not respond to the controls. Instinctively I feel that Smithy will let me have a go at her. I ram on hard opposite rudder and shove the stick forward. It makes no difference at all. The klaxon screams and whirls in my ears and the black nightmare drums at my brain. I saw at the controls and try to throw her out of the spin. I feel him at it again, so let go the stick and hold my feet back clear of the rudder bar.

Smithy's voice comes steadily through the tele-

phone:

"She won't come out."

To read this book is not only to re-live a great adventure, but also to admire anew the character and amazing skill of that truly great airman, Kingsford Smith, here seen through the eyes of a friend and companion who probably knew him

better than anyone else ever did.
"Pacific Flight" is that friend's tribute to
"Smithy," and it is fitting that it should also be one of the very finest accounts of a long distance

flight that has yet been written.

ALL ABOUT FLYING

"The Boys' Book of Flying": By Charles Boff: Routledge: 6s.

IN nineteen well-written, informative chapters, this book covers a wide range of present-day flying activities and can be read with value and enjoyment both by those boys who rather pride themselves on their aeronautical knowledge and by those who are frankly ignorant but interested. There are chapters on the Royal Air Force, its organisation and its aircraft; on the world's largest airship, the Zeppelin "Hindenburg"; on gliders and light aeroplanes, and on recordbreaking and test-flying. The aerial arts of parachuting, night-flying and aerobatics are described in simple language, and particularly fascinating chapters are those which deal with the Fleet Air Arm, "The Flying Navy," and the great commercial air-liners of to-day.

Mr. Boff is incorrect in describing the balloon apron as "the one device which has yet to be tried in deadly earnest "-it was used to good

effect for the air defence of London in the Great War-but more than one such slight error will be readily forgiven an author who has had the audacity to refrain from starting a boy's book on aviation with that all too familiar chapter on the earliest pioneers of flight. Even Mr. Boff, however, has not dared a complete break with the tradition and in a final chapter the achievements of such old friends as Montgolfier, Pilatre de Rozier, and the Wright brothers are all duly recorded for the benefit of those who do not already know the story by heart.

The book is well illustrated with thirty-five photographs of the latest types of British Service and civil aircraft, and should admirably meet that insistent demand among youngsters for aeronautical information which combines accuracy

with interest and entertainment.

'IRAQ-OLD AND NEW

"Air Over Eden": By "H. W." and Sidney Hay: Hutchinson: 18s.

'IRAO, a country richer in historical association than almost any other in the world, and boasting a civilisation older even than that of Egypt, is the subject of this fascinating travel book. The joint authors are a distinguished R.A.F. officer and Miss Sidney Hay, daughter of General Bruce Hay, and they have collaborated to produce a modern air book which is at once a description of 'Iraq as seen from the air and a remarkably vivid survey of 5,000 years of an eventful history which began with the Garden of Eden.

To the student of aviation, 'Iraq is a country of special interest as the one which conceived and proved the principles of Air Control. In 1920, our occupation of Mesopotamia was involving us in the maintenance of a huge army in the country and an annual expenditure of about 20 million pounds. Then it was that Air Control, in the form of a transfer to the Royal Air Force of the duty of keeping the peace, was given its first great oppor-The result was an immediate reduction in cost to four million pounds a year and, under "Tails Up" Salmond's leadership, a more efficient control than it had previously been possible to exercise. The numbers of supporting troops were steadily reduced until the cost came down to only one and a half millions and when, in 1922, 'Iraq was declared mandate under the protection of Great Britain, the system was continued, and has since been successfully extended to preserve order in such other areas as the North-West Frontier of India, Somaliland and the Sudan.

Defending the greater humanity of Air Control over other methods of law enforcement, the authors quote numerous instances of bloodless victories achieved by the moral effect on rebel-lious tribesmen of the mere appearance of R.A.F. aircraft, and summarise Air Control as "the cheapest, quickest and most effective method of stopping wayward tribesmen from raiding. helped governments to order unruly tribes, and has shown the patent disadvantages of banditry over honest toil and trade. Air action is simple. There is little danger, and there are few casualties to either side. It stops disaffection spreading, and enables strategy to take the place of tactics. Rebels respect authority which warns them first.

There is no 'close 'season."

It is not difficult to guess which of the two

authors contributed that passage.

Of the oil which is the chief reason for 'Iraq's present-day importance, and the asset which, so desirable to others, is also her greatest liability, the authors give much interesting information. Stretching across hundreds of miles of desert and plain is the great oil pipe line, marked at seventymile intervals by pumping stations which boost the pressure to send the oil on its way from the inland field to the tankers waiting in the Mediterranean. Beside each station is a landing-ground, significant of the vital importance of the air to 'Iraq both as a trade route and as the means of defending that artery of her life-blood, the pipe

And 'Iraq, it is made clear, is fully alive to her future in the air. Already she has an air arm of her own, the Royal 'Iraq Air Force, trained by British instructors to British standards and equipped with British aircraft. Behind it, in case of need, still stands the Royal Air Force, but in that native embryo the authors see a force which, in time, "may become large and powerful enough to place 'Iraq as a factor most seriously to be reckoned

with in Eastern politics."

Certainly the spirit is there as evidenced by a delightful story of an aged Bedouin Arab who once picked up a leaflet dropped from the air. "Asking a passer-by its meaning, he was told that the Aeroplane Society was appealing for funds to buy new aeroplanes. The old man was vastly pleased. Straightway from his rags he pulled out a string purse. It held a single dina (pound) note. Looking round the small group of curious citizens, he handed it to one who had an honest face, and bade him buy another aeroplane for the Royal 'Iraq Air Force !''

Most attractively written, full of information and good stories shrewdly told, and furnished with a wealth of really beautiful illustrations, "Air Over Eden" is something altogether new

and noteworthy in travel books.

OLD FAVOURITES

"The Three Squadrons": By Wilfrid Tremellen: George Newnes: 3s. 6d.
"Ace of the Black Cross": By Ernst Udet: George Newnes: 6s.

A COLLECTION of Wilfrid Tremellen's best air-war stories, and Colonel Ernst Udet's remark-able autobiography, both of which first appeared in recent issues of AIR STORIES, have now been

published in book form.

Wilfrid Tremellen's book comprises those four great adventure stories of "The Three Squadrons": "Bring 'em Back Alive," "The Penalty is Death," "The Macaroni Cup," and "Blood of the Black Prince." A striking threecolour wrapper by S. R. Dirigin adds to the attractiveness of this first-rate collection of stories.
"'Ace of the Black Cross," the memoirs of

Germany's greatest living air ace, is at once an important contribution to the literature of the World War and a thrilling tale of high adventure

in war and peace-time flying.

Both works are outstanding in their respective fields of fiction and fact, and their present appearance in book form should provide a welcome opportunity to new readers to enjoy two of the most popular features ever published in AIR STORIES, while those who are already familiar with their merit will now be able to add them to their library in an appropriate form.



A Description of the Gloster Gamecock Fighter with Full Instructions for Building a Solid Scale Model

By JAMES HAY STEVENS

EN years ago the Gloster Game-cock held the same place in the Royal Air Force that its worthy descendant, the Gauntlet, holds to-day. In its time it was the fastest and most manœuvrable fighter in service, though, since progress in military aircraft design is never at a standstill, newer and still faster fighters were even then in being or in course of quantity production.

The change in fighter design during the ten years separating the Gamecock and the Gauntlet is most interesting. In 1927, the Gamecock, with its dumpy fuselage and 450 h.p. radial engine was typical of its class. To-day the biplane fighter, as typified by the Gladiator or Fantôme, has added considerably to its stature, and has indulged in a certain amount of slimming at the same time. The modern low-wing fighter

is so different from the fashion of ten years ago as to be practically beyond comparison.

Mr. H. P. Folland, the talented designer of the Gamecock, has long been known for his association with the development of single-seat fighters, of which the latest mentionable example is the Gladiator, a machine now reaching the squadrons of the Royal Air Force. Students of history may be interested to know that the famous S.E.5 (subject of next month's article) was designed by Mr. Folland when he was with the Royal Aircraft Factory at Farnborough. Later, in 1918, a handsome little singleseater called the Nighthawk, with an A.B.C. Dragonfly radial engine, and produced by the British Nieuport Company to the designs of Mr. Folland, was also going into production for the R.A.F.

When the Gloster Aircraft Company was formed after the War, the Nighthawk designs were taken over and Mr. Folland was appointed Chief Designer. His next fighter design to be adopted for the Royal Air Force was the Grebe, followed closely by the subject of this article. A discerning eye can trace a certain resemblance to the S.E.5 in some of the features of the Gamecock.

There were two Gamecocks built, the Marks I. and II. The former saw service with the R.A.F., while the latter type was adopted by the Finnish Air Force. The Mark I. type is the subject of this article.

The Gamecock was especially noted for its exceptional manœuvrability, and is still remembered for the ærobatic shows put up on it at several successive R.A.F. Displays.

Construction and Performance

THE wooden wings were fabric covered. The top plane was in two halves, bolted together on the centreline of the machine, and supported by a cabane of inverted vee struts. petrol tanks were mounted in the upper planes and were partially supported by inwardly raked struts to the top longerons. The forward sloping ailerons on the upper planes were an unusual feature. Another special point, common to Gloster aeroplanes of that day, was the adoption of a medium lift section for the lower planes and of a thick highlift section for the upper ones. centre-section struts were of streamline steel tubes, while the interplane struts were made from spruce bound with glued tape at the middle and each end.

The fuselage was built round four

spruce longerons, the oval section being obtained by wooden formers and light Except for the detachable stringers. metal cowling at the nose, the fuselage was entirely fabric covered. high as he was, with his eyes on a level with the chord of the top plane, the pilot had an excellent view in all direc-The armament consisted of two synchronised Vickers guns mounted on each side of the fuselage, with their breeches within easy reach of the pilot. A rack for four 20-lb. bombs could also be mounted. A two-way radio set, oxygen and lighting gear were all standard equipment.

The engine was a Bristol Jupiter VI. nine cylinder, direct drive air-cooled radial. This engine was not supercharged, but maintained its power up to a fair altitude because of its high compression ratio. The following are the data for this engine:—

An exhaust collector ring and long flame-damping exhaust pipes were standard equipment.

The tail unit was wood-framed and fabric covered. The rudder, lower fin and tail-skid were very reminiscent of the S.E.5.

Below are given the main data of the Gamecock I., and also of the Gamecock II. with a 450 h.p. Gnôme-Rhône Jupiter VI as used by the Finnish Air Force:—

Weight, empty	1,930 lb. —
	2,863 lb. 2,834 lb.
Max, speed, sea level .	— 144 m.p.h.
,, ,, 10,000 ft	145 m.p.h. 154 m.p.h.
" " 15,000 ft	150 m.p.h.
Stalling speed	49 m.p.h. 50 m.p.h.
Climb to 10,000 ft	7.6 mins. 5 mins.
Ceiling	- 23,500 ft.

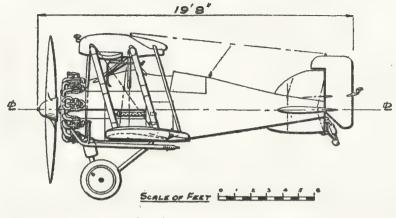
HOW TO BUILD THE SCALE MODEL Materials, Tools and Methods of Construction and Assembly

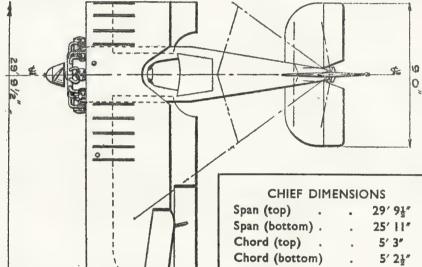
THE three-view General Arrangement Drawing on page 67 and the dimensions of materials given hereafter are for a $\frac{1}{72}$ nd scale model. To make a model to any other scale, it is advisable to re-draw the sketches to the chosen scale before starting on the model.

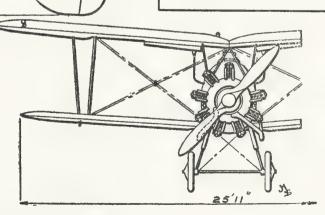
Materials and Tools

THE model will require the following materials: a block of wood $2\frac{1}{2} \times \frac{3}{4} \times \frac{3}{8}$ in. for the fuselage; a sheet of wood $5 \times 2\frac{1}{2} \times \frac{3}{16}$ in. for the upper plane, and another $4\frac{1}{2} \times 2 \times \frac{1}{8}$ in. for the lower planes the tail unit will require

THE GLOSTER GAMECOCK FIGHTER







Length . .

Dihedral . .

. 19'8"

4°

A Three-view General Arrangement Drawing of the Mark I. Gamecock Fighter

AIR STORIES

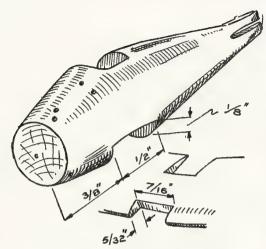


Fig. 1.—The fuselage block, showing the cut-out for the lower plane

a piece of fibre about $3 \times 3 \times \frac{1}{16}$ in.; for the various struts, some 2 ft. of 20-gauge brass wire is necessary. Wheels can be bought from any good toy or model shop. The engine can also be purchased at a model store.

Here is a list of the essential tools: one $\frac{1}{4}$ in. chisel; small plane; penknife; oil-stone; small half-round file; $\frac{1}{16}$ in. bradawl; fretsaw; small longnosed pliers; plastic wood; tube of cellulose glue and a penny ruler measuring in $\frac{1}{16}$ ths, $\frac{1}{12}$ ths and $\frac{1}{10}$ ths of an inch.

Method of Construction

BEFORE starting to work, make sure that everything necessary in the way of materials and tools is to hand, and that the following instructions are thoroughly understood.

Trace the side elevation of the fuselage from the G.A. Drawing. Place the tracing on the block of wood for the fuselage, pin-prick the outline, then line it in with a pencil. When preparing the fuselage, the nose section with the engine should be omitted at this stage. Cut away the surplus wood with saw, plane and chisel. Draw a centre-line on the top and bottom surfaces of the block, and then draw the outline of the fuselage plan. Again remove surplus Now round the cubist fuselage to its correct section. **Immediately** behind the engine it is almost circular; at the cockpit, it is the shape of an inverted egg gradually becoming elliptical towards the tail. Hollow the cockpit, make the slot for the tailplane and the holes for the centre-section and undercarriage struts. The fuselage at this stage is shown in Fig. 1, which also gives the size of the slot for the lower plane.

The outlines of the planes are drawn on their respective pieces of wood. Both the upper and lower planes are cut out in single pieces. The wing sections are obtained by planing and filing them to shape. Outline the ailerons by scoring them with a bradawl and ruler. Holes should be made for the various struts.

The tail unit is cut from fibre, cambered, and the control outlines scored in a similar manner to that used for the main planes.

All struts, including the undercarriage vees, are made from wire. The streamlined fairings on the interplane struts and the front undercarriage struts are made from small folded strips of paper.

Fig. 2 shows how a small curtain ring glued round the "crankcase" of

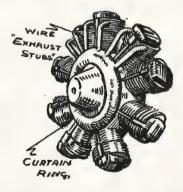


Fig. 2.—Cast model engine with "curtain ring" exhaust manifold and wire "branch pipes" fitted to three cylinders

a model engine represents the exhaust manifold, and small lengths of thin wire are glued on to represent the eighteen branch-pipes. This part of the work is best done after the rest of the model has been assembled.

The making of the airscrew is quite a simple matter and the three principal

A VETERAN FIGHTER OF THE R.A.F.

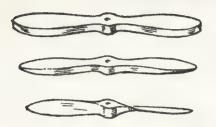


Fig. 3.—Three stages in the carving of an airscrew from a wood billet

stages in its emergence from a wood billet are clearly shown in Fig. 3.

Method of Assembly

NOW give the lower plane its correct dihedral by gently bending in the heat of a candle flame, and glue it beneath Fit the centre-section the fuselage. and interplane struts, put the top plane in place, and adjust the strut lengths until the correct gap and stagger, together with good alignment, have been obtained. Remove the top plane, reassemble the whole with glue, and allow to set firmly.

Glue the tail-plane and elevator unit into its slot. Then glue the fin and rudder to the rear of the fuselage. Glue the tail-skid fin firmly in place and then fit a piece of wire to represent the skid

itself.

Fit the undercarriage vee-struts and adjust them for length and alignment. Thread the wheels and axle.

Glue the model engine to the nose of the fuselage and then assemble the exhaust ring as shown in Fig. 2. tail pipes are made from brass wire and may be soldered to the curtain ring before it is glued in place.

The final details can now be added airscrew, navigation lights made from painted pin-heads, gun muzzles from wire, and petrol tanks from pieces of shaped fibre. For a method of fitting bracing wires, reference should be made to last month's article.

Painting and Colour Scheme

THERE were three Gamecock squadrons in the Royal Air Force, Nos. 23, 32 and 43, of which the squadron markings were, respectively, red and blue squares, a blue bar with silver diagonal stripes, a double row of black and white checks. The most famous Gamecock squadron was, perhaps, No. 23, and a flight of this unit's machines is shown in the sketch heading this article. They were painted as follows: main colour, silver; cockades on wings and fuselage, stripes on rudder; engine cowling and top decking as far as the cockpit, battleship grey; interplane struts of varnished spruce, all other struts black; engine, black with greyish exhaust pipes; airscrew, light-brown blades, red-brown boss and silver spinner. The squadron marking on the upper plane between the cockades consisted of four red and five blue squares. This distinctive marking was also painted along the entire side of the fuselage. The machine number was painted in black beneath the lower planes, on the rudder (outlined in white) and on a silver rectangle left on the rear part of the squadron marking on the fuselage. The wheels were painted red, yellow or blue according to whether the machine belonged to A, B or C flight.

Small twopenny pots of enamel will suit admirably for model work. No. 5 sable or camel-hair brush and a small liner's brush will be found to be most satisfactory.

As far as possible, apply the first coat along the grain and the second, and any subsequent, coat across the grain. It is important to remember to put the paint on thinly and evenly and allow each coat ample time to dry.

NEXT MONTH: The S.E.5a. Scout

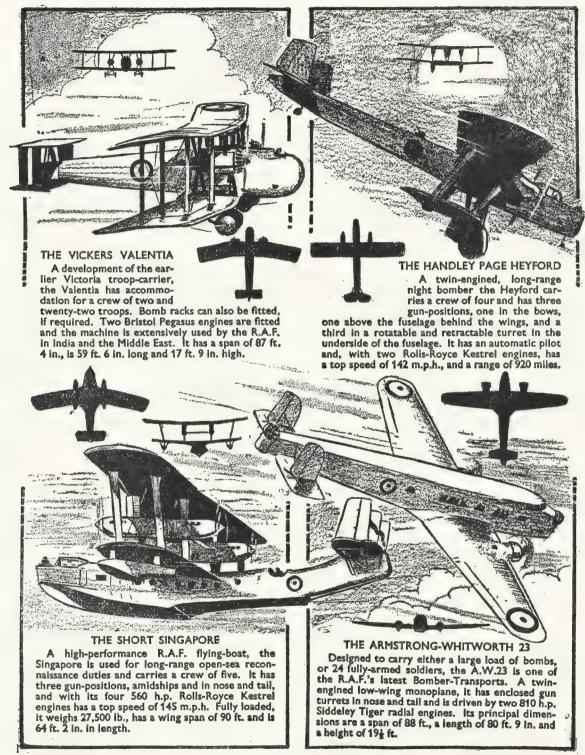
PREVIOUS MODEL ARTICLES

REQUESTS are constantly being received for back numbers of AIR STORIES containing previous articles in this Model Aeroplane series. Several issues are now out of print, but a limited number of the following issues are still available, price 9d. post free:

1936: June (Fokker D.3), July (A.W. Scimitar), August (D.H.9), September (Avro Anson), October (D.H.5), November (Fairey Fox), December (Pfalz D.12).

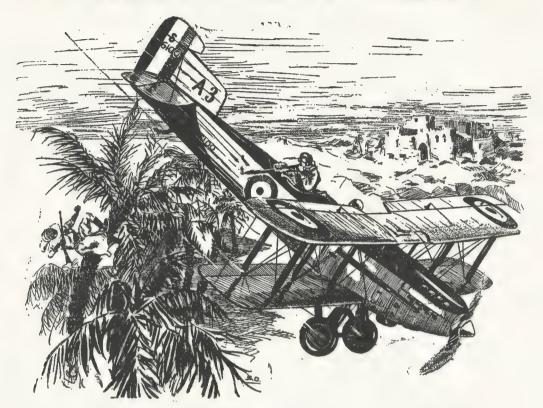
1937: January (Rota Autogiro), February (Short N.2B), March (Bristol Blenheim), April (Vickers Bullet), May (Westland Lysander).

A GUIDE TO SKY-GAZERS-2



Three-view sketches of some of the R.A.F.'s multi-engined warplanes that should make recognition easy

FAIREYS CAN FIGHT



As the Fairey's wheels almost brushed the tree top, Lister sent a sudden burst into that sheltering foliage

When, in the Course of Special Duties with the Palestine Police, Flying Officers Boyle and Lister—otherwise "Boil" and "Blister"—chanced upon an Arab Ambush it was inevitable that they should promptly Decide to "Clean up the Nest and Make it Beautifully Untidy"

By J. H. STAFFORD

ITHOUT the formality of a knock, Flying Officer Johnson strode into the quarters of Flying Officer Boyle of No. 216 Squadron stationed at Heliopolis, Egypt. Nobody ever knocked at Boyle's door because it was usually open.

With an easy familiarity that their names encouraged, he addressed the two occupants.

"Boil and Blister, the Old Man wants you in his office." His glance fell on the toy balloons with which Boyle's bed was decorated.

In reply to the grinning inquiry, Lister explained:

"Boyle has joined the Balloon Section, and we've been celebrating it in Cairo."

"Shepheard's ?"

"No," Boyle interrupted, "the Museum, looking for Blister's conscience." Tenderly he fingered an ugly lump on the side of his head. "We threw a party, Blister, the ass, threw a glance, she threw a fit, her husband threw a bottle, and the crowd threw us out."

"And now you're through," Johnson laughed.

"That's what I thought when I hit the curb," Boyle said sadly.

"Come on, let's go," said Lister, and together the two companions in misfortune made their way to the C.O.'s office.

"Come in!" The curt tone of Wing Commander Burton as he answered the timid knock was far from friendly. A just but rigid disciplinarian, he demanded immediate attention with the minimum of delay.

Hovering uncertainly outside, two headaches exchanged guilty glances. Boyle nodded at the door.

"You, he means," he said.

As Boyle remarked later—"The way the Old Man looked at me, I might have been wearing horns instead of wings." He tried to face that frigid stare without flinching.

"Are you feeling quite well, Boyle?"
Vainly Boyle searched for sympathy
in the inquiry before he answered,
"Yes, sir, slight headache, sir."

A light of understanding gleamed for a moment in the Wing Commander's eyes and vanished suddenly. "You will report to Colonel Barrington at Jaffa for special duties." He glanced meaningly at Boyle. "The drier atmosphere of Palestine has a particularly soothing quality; I trust you will find relief there."

Boyle coloured as the Wing Commander continued, "Colonel Barrington expects you by mid-day. Report to me for mail before you leave. That is all."

TIFFIN was a forgotten item at the headquarters of the British Section of Palestine Police at Jaffa when Lister taxied the Fairey III.F across the Macabee sports field which served as a temporary 'drome. There was an obvious welcome in the smile of Colonel Barrington as the two pilots faced those penetrating eyes. Nodding towards the figure of an Arab beggar who stood nearby, he said:

"You've met Captain Harvey before, of course."

Both pilots stared uncomprehendingly at the tattered bundle of rags. Boyle hesitated before gripping the outstretched hand, his eyes searching the face, the eyes, the hands and even the dirty sandalled feet for a flaw in the disguise. So complete was the transformation of Captain Harvey that, while the Colonel detailed his instructions, the two friends found their eyes wandering again and again to that strange figure.

"Captain Harvey," the Colone was saying, "is a British Service Intelligence Officer; I want you to convey him to the point that you will find marked on this map. There will be others there who are expecting him."

"May I see that, sir?" Lister reached for the map, but the Colonel's hand checked him.

"All in good time, my boy. Get some food first and report to me as soon as you are ready to leave."

A few minutes later they were ready to take-off, and Boyle, squeezing into the rear cockpit of the Fairey beside Harvey, intently studied his companion.

"Do you think I'll pass as an Arab?"
Harvey inquired smilingly.

Boyle sniffed the familiar odour of the Arab markets.

"You ought to," he said; "you look like an Arab, and talk like an Arab, and I'm hanged if you don't smell like one."

Harvey nodded his appreciation at the unconscious compliment.

"Thanks, but you don't have to keep sniffing me," he said.

"Sniffing!" was the indignant retort.
"I'm not sniffing; I'm trying to breathe
a little more of God's good, clean air
and a little less of Allah's."

ON that barren, sandy waste that borders the lava-strewn hills of Trans-Jordania and the naked emptiness of Central Arabia, Lister sighted the waiting camels and glided down. The two Arabs who greeted Harvey salaamed the pilots, and Boyle, grandly demonstrating his entire vocabulary of Arabic, returned the salutation in the manner of a master.

"Salaam alaikum—thanks," he said, without the faintest understanding of the literal interpretation of the greeting.

Bidding Harvey good-bye, they took-

FAIREYS CAN FIGHT

off, and, as they circled the three lonely riders, Boyle waved a cheery farewell and wondered what secret mission, what hazardous experiences, awaited the adventurous Harvey in that lonely place.

Then, for mile after mile the barren desert sped by beneath the Fairey's wings until Boyle, bored by inaction, leaned over his friend's shoulder and recognised a landmark.

"That place, Em-Jemel," he said; "there's a very old castle there, built by the Romans and afterwards rebuilt by the Crusaders. Lawrence stayed there once." And as though to emphasise its distinction, he added: "So did I. Interesting place, and not far off our route." Lister caught the suggestion.

"Might as well glance at it—just to say we've seen it," he shouted back.

WRAPPED in the melancholy mystery of decay, the crumbling walls of the old fortress were eloquent of the dusty stories of a long dead and forgotten glory, the ancient roofless ruins glaring their defiance at the encroaching desert.

It was, therefore, with something of a shock that the two airmen found the quiet peace of the old castle suddenly disturbed by the excited shouts of khakiclad figures. Landing gently on the rippled cushions of soft sand, Lister taxied up to the walls of the fortress, glanced casually at the small oasis of camel thorn some two hundred yards away, and gazed curiously at the group of naked palms that marked the waterhole. It is not surprising that his eye failed to observe the Arab sentry huddled in the foliage of the tallest palm; no eye but an Arab's could have detected that cunningly camouflaged figure.

"What's the matter with him?"
Boyle indicated the frantically waving soldier in shirt and topee on the wall.

"Hi! Get inside here, you're under fire."

There was no mistaking the urgency of that warning, and the two pilots glanced around in surprise at the empty desert, at the undulating waves of sand, the serene innocence of the oasis. Once again there came the warning shout of the sentry, and they hurried inside the castle walls to gaze with wondering eyes at a handful of British troops. Three sentries leaning on the walls, their rifles resting between chinks in the ruins, brought home to them the grim reality of the position.

A tall, efficient-looking lieutenant approached.

"Thank God you've come," he said, his tone betraying his relief. Boyle returned the other's grip.

"What's it all about?" he asked.

The dark lines of sleepless nights deepened in the lieutenant's face. For a moment he paused, as if in doubt.

"Didn't you know about this?" he asked, and without waiting for a reply he continued, "I thought you were a relief. I see you don't understand. Perhaps I'd better explain. I was on desert patrol with fifteen men and got cut off, sniped in the rear without seeing a living being. It was impossible to return to my base, so I made for the shelter of these ruins, expecting reinforcements to relieve us. We have been in this trap two days and cannot put a fly on that wall without a sniper spotting it. Our water is nearly exhausted, and the Arabs—a raiding party of Akhwans, I should think—are sitting tight in that oasis over there."

The two pilots glanced curiously at each other.

"But why not rush them out? Why sit here and let a handful of niggers jam you?" Lister asked.

"I've thought of that," the lieutenant said, and his tired eyes suggested that he had thought about it quite a lot. "You must remember," he went on, "that I have fifteen men here and two of them wounded. I don't know how many of those devils there are—perhaps a dozen, perhaps fifty—but we should be mown down before we were half-way there. As long as I could hold them off until help arrived I had no need to risk men's lives."

"I see." Lister stroked his chin meditatively. "Bit of luck we dropped in here, Boil, old boy. What do you suggest?"

AIR STORIES

Into Boyle's eyes crept a light of schoolboy enthusiasm.

"Our lucky day," he said; "come on, Blister, old crab, we'll clean up that nest and make it beautifully untidy."

EVEN as he turned, there came a sudden shouted warning from the watching sentries, followed immediately by the stunning crash of three rifles fired in unison. There was a concerted rush for the broken wall, as from across the desert came the muffled phut, phut, phut of soft-charged Arab rifles.

Out on the sand lay a dark, huddled heap clutching a still burning torch.

"God! Look at them."

Lister's startled exclamation was unnecessary. Every eye was focussed on those dark shapes slithering like snakes from the oasis. Crawling, dodging, jumping, cunningly taking advantage of the shelter offered by the smallest stone, the horde of Arabs advanced, pausing occasionally to take aim with their peculiar long rifles. Slowly but surely, they crept towards the unprotected aeroplane. As the foremost Arab reached that still form he snatched the smouldering torch, dropped his rifle, and with a wild yell, tore with flying robes towards the Fairey.

With one spring Boyle cleared the wall, scrambled to his feet and rushed headlong for the rear cockpit. moment he was inside the Scarff ring of the gun-mounting. Frantically he tore at the cocking handle. So near was the Arab that Boyle could see the feverish black eyes and pock-marked features of the racing madman. As Boyle fired there came a fiendish scream, bloodcurdling in its evil intensity. backwards by the impact of the bullets, the Arab collapsed, struggled to his knees and in a desperate, dying effort, flung the torch towards the machine. He was dead before it dropped a few yards from its objective.

Coolly, steadily, Boyle raked the desert in a slow traverse; no living creature could have escaped that terrific, deadly stream.

"Hold them off, Boil." Lister's

shout sounded above the intermittent crashing of the rifles. As he half scrambled, half fell, from the wall he called back: "Hold out for help—shan't be long." He winced as a ricochet hummed to a whistle dangerously near to his head.

A moment later the now continuous and steady rifle fire mingled and was lost in the bursting roar of the Napier.

A happy grin spread over Boyle's features as the Fairey banked a thousand feet above the fort and tore with a nerve-shattering scream towards the oasis. Lister held on to a long burst into the thickest of the brushwood. He fancied he saw dark shadows flitting about between the palms, but it was difficult to pick on any one object.

As the wheels of the Fairey almost brushed the fronds at the tops of the trees, a puff of white smoke belched from the tallest. Boyle's watchful eyes caught it. At a range of less than fifty feet he sent a sudden short burst from the rear gun into that sheltering foliage. Something detached itself, fluttered for a moment and dropped heavily to the sand.

Three times they circled the oasis, but their searching gaze was unrewarded. A grim satisfaction warmed them, however, as they noted the dark heaps that scarred the grey sand between the well and the fort. A thin wisp of blue smoke curled lazily into the still air from the smouldering torch. With a gentle dive they saluted the little garrison and headed for Amman camp.

In the shocked silence that followed the first misfire, Boyle shouted in a concerned voice:

"What's the matter? What's wrong?" Leaning over Lister's shoulder he stared at the quivering needle of the revolution counter, now hovering round the 100 mark. The weakening rays of the sinking sun glinted on the idling propeller, mocking the frown of annoyance on Lister's face.

In one crisp word he shouted his explanation.

"Conked!"

FAIREYS CAN FIGHT

As the huge fiery ball that is at once man's blessing and torture hesitated for a second on the horizon, the Fairey rolled to a halt. In a short fifteen minutes the deadening curtain of darkness would cloak the desert with startling suddenness.

"Well, that gives us a ticket to the great open spaces for to-night, at any rate." Boyle held out for his friend's inspection the fractured distributor head. "Wonder we got so far as we did," he

added.

"I don't mind the great open spaces," Lister said, "and I don't mind a night out here, but what about those poor devils back there?"

"Oh, I think they'll be all right. We gave the beggars something to keep them quiet for a while." Boyle's voice rose a shade with the memory of that first dive. "Did you see that Johnny I nabbed in the palm? Trying to get to heaven with a rifle. I told him all about it with the rear gun—he was going the wrong way when I last saw him."

With the aid of the instrument lights, Lister succeeded in repairing the damaged head with melted rubber and insulation tape. The soft, velvety blackness of the early night and the lack of night-flying equipment prevented them from continuing their journey, but after a lengthy debate, it was decided that a take-off could safely be attempted when the moon rose after midnight. Both men offered to take the first relief of an hourly guard, and the point was finally decided with a coin.

It was a few minutes after eleven o'clock when the crescent moon peeped timidly over the distant hills, throwing the desert into fantastic shadows. Boyle rose from his seat against the wheels, stretched and lit a cigarette.

Like the startling crash of unexpected thunder in the night, a shot rang out, echoing and rolling away across the sky. Boyle dropped to the sand, the cigarette falling unnoticed from his lips.

"What's that?" Lister bounded up from the cockpit where he had been dozing. "Shut up! Keep quiet and listen," Boyle hissed.

"But it was a shot, wasn't it?"

"Yes, some dirty dog fired at me, just as I was lighting up."

"Did you see from which direction?"

"No, wasn't looking—you get hold of that rear gun and watch—I'l light another match and hold it up." Boyle rolled on to his back and struck a match with his upraised hands.

Instantly two flashes came from the shadows. Hardly had the bullets whined over the Fairey than the vicious chatter of the rear gun shattered the stillness.

They waited. No cry, no scream of sudden pain, not even the faintest groan, came from the treacherous shadows. The utter silence of the desert engulfed them.

In a barely audible voice, Boyle

whispered:

"I'll light another match—get ready." The thin flame flickered and trembled, flared up and died. In the death-like silence that followed, Boyle found himself peering expectantly into the gloom. Then, scrambling to his feet, he muttered:

"Now what deviltry are the beggars planning?"

"Quiet a minute." The urgent caution of Lister's tone checked Boyle's abuse. "Come up here," he said. "See that scrub over there—look, five o'clock by the moon?"

"Yes, I see, a bit of camel thorn."

"Camel thorn or not, it should know better than to stroll about the desert at night. It was just over the tip of the tail-plane a moment ago. Watch! Watch! There!"

Undoubtedly it had moved—or had it? Was that black patch the shadow of a sand hump thrown by the moon, or was it—yes, it was moving. Again the desert echoed to the staccato bark of machinegun fire. Again there followed that nerve-racking silence.

Boyle chafed at the enforced inactivity. He was young enough to welcome the chance of a fight, but he liked, above anything, to see what he was fighting.

"I'll start her up," he growled

savagely, "if she will start. We can't stay here and be sniped off like a couple of rabbits by those creeping devils."

With unusual energy he swung the starting-handle of the Napier and there was more than a trace of relief in his voice as he shouted above the uneven firing of the fully-retarded engine.

Lister was quickly in his seat, and as the flying dust followed the racing machine across the sand, a veritable storm of rifle fire burst from the empty desert, and points of flame stabbed the darkness in an uneven circle. They turned and flew low over the spot, but even in the brightening moonlight it was impossible to distinguish shadow from substance.

Exactly one hour later a sleepy-eyed airman-of-the-watch sat up in the cab of the ambulance on Amman 'drome, rubbed his eyes, stared, and rubbed his eyes again.

"Wire this machine in—pilot, Lister; passenger, Boyle—all stations," Lister commanded.

"But you haven't been out, sir," protested the puzzled airman.

"Righto—but we're back just the same." Boyle laughed as he spoke.

"I mean, sir, you haven't been wired out from anywhere."

"That's all right," Lister replied;
you'll feel better in the morning.
Now drive us to the C.O. and see to the messages afterwards."

THE first searching rays of the rising sun scorched their way over the desert, warning with warm fingers of the heat to follow, and lighting, like a set stage, the quiet efficiency of a squadron preparing for battle action. Two Vickers Victorias were already running up, their main planes vibrating with the unleashed power of their twin Napiers. Like a wanderer in a strange land, the Fairey stood aloof and detached from the nine Harts lined up on the tarmac.

A choking cloud of dust disturbed by the departing squadron hung over Amman 'drome long after formation had been obtained, and the Fairey, slower than the more modern Harts, was soon left

behind like a straggler from the flock.

An hour later, the Fairey had caught up with the formation, and Lister and Boyle stared in dumb amazement at the circling, diving fury of the Harts as they swept in upon the old ruins, swarming with black-cloaked figures and standing like an island in a vast sea of camels. Horror gripped both men as they flew in a wide circle over the limitless mass of frenzied, terrorstricken animals. The white kafiers and dark goat's-hair cloaks which distinguish the Beni-Sukers, the most savage and treacherous of all Bedouin raiders, added to their fears. The barbaric banners, unfurled for action, flung a bitter defiance at the savage, methodical determination of the attacking Harts.

"My God! Those poor devils we left there." Boyle echoed the thoughts of both men as through their minds floated those tales of incredible savagery and unmentionable torture that every traveller in the East has heard and so few believe. A burning hatred for that swarming black evil beneath seized Boyle. With staring eyes he watched the cool. deadly, murderous dives of the Harts. There was something awe-inspiring, a little frightening, in those shattering power dives. Those machines diving, screaming and flashing with amazing speed down and up in perfect formation, had the consistent regularity of ocean waves.

With the idea of cutting off the retreat or escape of individual Arabs overcome by the intensity of the attack, Lister circled low on the outskirts of the battle. A sudden zoom without warning made Boyle cling to the gun-mounting. The Fairey banked sharply, hesitated, and dived like a hungry hawk on a solitary figure in dark robes crawling away across the sand.

Lister sighted, picked up the white kafter of the doomed Arab in the ring of the sights, laughed as the arms were raised as if in terror, and hesitated. What persuaded him to pause at that critical moment will remain, even to Lister, one of life's unsolved mysteries. For as the Fairey thundered a few feet

FAIREYS CAN FIGHT

over the head of the lone figure, Boyle stared over the side into the upturned face of Captain Harvey.

The Hart that flashed over the taxying Fairey as Harvey scrambled into the cockpit beside Boyle was a magnificent tribute to the watching, eagle eye of the squadron leader.

"Troops safe in a 'wadi' fifteen miles north." Boyle repeated Harvey's message in Lister's waiting ear.

TEN minutes later the Fairey joined the Victorias, and, taking direction from the pointing arm of Harvey, the strangely-assorted flight headed for the "wadi," where fifteen men and a lieutenant lay exhausted and unsheltered in the torturing sun.

The relief of the airmen was dimmed slightly at the sight of those parched, swollen tongues and red-rimmed, bloodshot eyes. Douching the head and neck of each man with water, Harvey denied their craving thirsts until the lips, tongue and mouth had been thoroughly moistened with a soaked rag.

When the last of the staggering, glassyeyed troops had been helped into the Victorias and the cabin doors locked, Lister turned inquiringly to Harvey.

"What about you?" he asked. Harvey ignored the question and surprised both pilots by asking:

"Can you call off your people at the fort?"

"Yes, I suppose we could, but why? They're happy enough."

Boyle's mystified expression brought a smile to the dust-caked features of Harvey. "I don't want those Arabs wiped out yet," he said, "some of my best men are among them." Anticipating the stream of questions that hovered on the others' tongues, Harvey added, abruptly, "Come on—no time to lose."

But it was some little while before the savage, snarling Harts could be drawn from the merciless bombardment of their prey. At last, the squadron, battle-scarred but complete, was reformed wing-tip to tail-plane, and acknowledging the instructions of the

waving Harvey, they roared away after the Victorias with the pride of returning conquerors.

TWO hours later in the office of Colonel Barrington, Boyle's curiosity bubbled, fermented and overflowed.

"What's eating holes in my patience," he said, "is, how on earth the troops got away from the fort with those Arabs there, and how you came to be fraternising with such a nasty gang of cutthroats."

Harvey's even white teeth flashed in a smile that shattered his Arabic disguise.

"The troops left the fort during the night before that party of Beni-Sukers arrived," he said. "The Arabs who were camped in the oasis were just a small band of raiding Bedouins, and they were perfectly contented to leave shortly after you, knowing that a squadron would certainly arrive before long. The crowd you found when you returned were a much more sinister lot. Had they caught the troops in the fort, the whole R.A.F. could not have saved them. Fortunately, some of my men-Arabs, of course, in English pay-were scout outriders to the Beni-Sukers, and between us we were able to warn the troops to get out in time,"

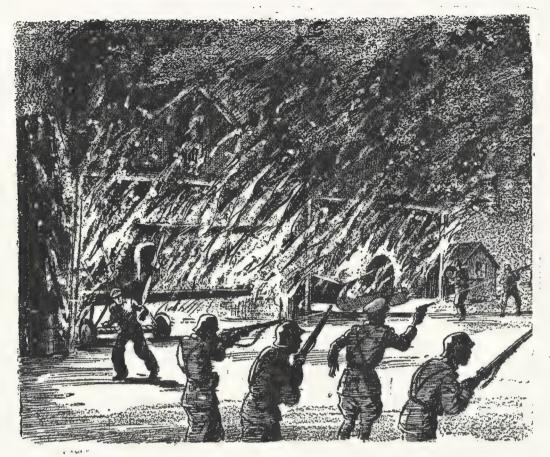
"But, how comes a force of armed Arabs—four thousand or five thousand strong—to be drifting about like that so near to us?" Lister asked.

"On their way to Palestine," Harvey replied. "You see, we have suspected a gathering of the Beni-Sukers for some time; I wanted exact information. They will be gently persuaded to cross the border somewhere around Drebble-Drusia."

"Why?" Boyle asked with the simplicity of a schoolboy.

"Because we should like them to." Harvey's voice drifted to a baffling silence in his glass. In the searching eyes of the Colonel, Lister caught the gleam of hidden depths.

"There happen to be four companies of the Trans-Jordania Frontier Force there on manœuvres," he murmured.



Closer and closer came the sheds, a roaring mass of smoke and flames . . .

DOUBLE DECOY

A Long Complete Western Front Adventure Featuring Major Sharpness and a Spad Squadron Dogged by a Strange Hoodoo

CHAPTER I

Ambushed from the Sky

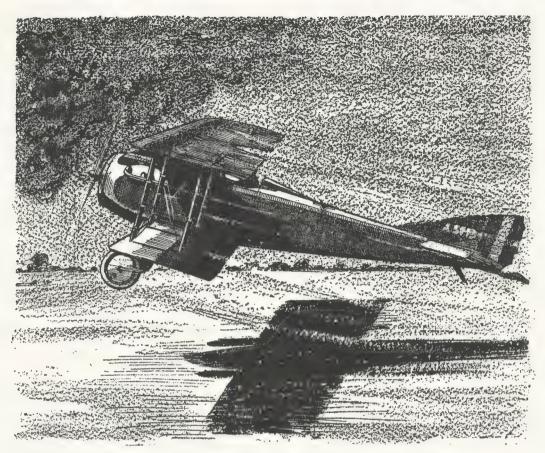
HE little Spad came in fast with Hisso whining—so fast that the mechanics on the tarmac scattered right and left.

Behind it came another—but with a difference.

For whereas the foremost 'plane sped straight as a hiving bee, this other weaved and staggered in its flight as though it were barely under control.

Before the first came to a standstill, its pilot dropped from the cockpit and, without waiting to see whether his 'plane came safely to rest, began to run back towards the second machine which was now about to land, its tail swinging wildly as its pilot over-corrected.

The wheels bumped on the ground, and the engine died as the switch was cut. The 'plane bounced upwards, stalled and came down again with a force which buckled the wheels whilst the running figure was still some paces from it.



. . . and at the last moment the Spad lifted, staggering into the air like a gorged vulture

A Lone 'Plane as a Decoy and a Swarm of Scouts waiting on high to Pounce on the Unwary Attacker—that was an Old Trick in the War Game and Fair Enough Compared with the Treacherous Sky Trap that was Plunging the Men of Sharpness's Squadron into Flaming Death

By MAJOR L. S. METFORD

Late of No. 13 Squadron, R.F.C.

He tore on, ducked beneath the lower plane and grabbed at the tail-skid as it rose in the air. The tail rose higher and higher, jerking him off his feet, but he hung on grimly with heels dragging in the clay. Then, as the tail came down again, he rolled over sideways clear of the empennage.

He scrambled to his feet, ran to the side of the fuselage and vaulted astride. Reaching down, he pulled the pin from

the safety belt of the pilot, who had slumped forward on to his joystick.

"How're you feeling, Mike?" he demanded anxiously.

Lieutenant Michael Flaherty opened his eyes and grinned weakly. "Splendid, Skipper—splen . . ." He fell forward again, unconscious.

Captain Anthony Hawkins, lately posted to the command of "A" Flight No. 301 Squadron R.A.F. at Villeron, slid to the ground as a Crossley tender ran alongside.

"He's not cashed in, Doc.," he announced as the Squadron M.O. hurried forward. "For God's sake, do what you can for him."

Mechanics, arriving hot-foot, helped to lift the unconscious pilot to the ground, where they laid him gently on a stretcher.

The M.O. bent down, unfastened the bloody helmet, and made a hurried examination of the wounded man.

"He'll come round all right," he announced, at length. "Superficial scalp wound. Slight concussion and considerable loss of blood. Nothing serious that I can see."

"Thank the Lord for that," muttered Hawkins as he straightened up. "Three's bad enough—three too many, in fact."

He hurried off, deliberately avoiding the little group of officers which was rapidly collecting, and bent his steps in the direction of a short squat figure approaching from the squadron office.

He halted and saluted as they met.

"Where are the others?" demanded Major Sharpness curtly as he acknowledged the salute.

"Gone, sir," mumbled Hawkins.
"Blotted out—dead. My God, Major,"
he broke out fiercely, "it was a hell of a
show! And it was my fault. All my
fault. Led 'em straight into it with my
eves wide open."

He pressed the palms of his hands against his eyes as if to shut out some terrible vision.

"Who's that?" asked Sharpness, nodding towards the little group near the Crossley.

"Flaherty, sir," Hawkins groaned.
"He's wounded in the head. And I,"
he laughed a little hysterically, "I'm all
right—not even a scratch."

"Shut up, you fool," ordered Sharpness curtly. "Don't imagine you did it on purpose. How'd it happen?"

He laid a hand on his flight-commander's elbow and propelled him towards the office. He kicked the door open and thrust Hawkins into a chair beside the stove. Then he fished in a cupboard and produced a bottle of Scotch and a glass. "It's good stuff. Don't spoil it by adding water," he advised as he handed it to Hawkins. "Scoff it down and then give me your report."

Hawkins took the whisky with unsteady fingers and swallowed it gratefully. The glass clattered as he placed it on the table.

For a full minute he sat with his head buried in his hands, as the nightmare he had just been through renewed itself in his mental vision.

Sharpness loosened his red muffler and stood looking down upon him dispassionately.

It was currently reported that this man, who commanded No. 301 Squadron, had neither heart nor soul; that in their place he possessed some strange apparatus presumably composed of an alloy of chrome-vanadium-steel on which nothing made the slightest impression.

He had never been known to exhibit any feelings of the gentler kind, and his sole ambition seemed to be to keep as many machines—his own included—in the air at once as was humanly, or inhumanly, possible.

But he understood men. He knew exactly how much he could get out of any given pilot and divined by instinct where lay the invisible line over which he would crack if driven, and he seldom went beyond it.

"Now then," he demanded impatiently, "what was the trouble? Too many Huns, or what?"

Anthony Hawkins rose to his feet and looked about him dazedly, fighting to get his frayed nerves under control and to find common everyday words in which to clothe the terrible experiences of the last hour.

"You know that trick of theirs," he began huskily, "of sending up an old bus as a decoy and, as soon as our fellows attack it, a Staffel hidden in the clouds drops down and does 'em in?"

Sharpness nodded. "Old as the hills. You didn't fall for it, did you?"

"Not quite as bad, but nearly, sir. It was a dirty trick, a dam' stinkin' trick, they tried this time. We spotted a new

Spad being attacked by a couple of Fokkers. Putting up a hell of a good scrap, too. They were simply plastering him.

"I gave the fellows the signal to attack and we dropped on to their tails. We had hardly fired a single burst when about a dozen Huns were on us. Not only that, but the Spad joined in, too—the swine. We got four of them, but they snaffled Browne, Littlejohn and old man Hendries. Hendries' 'bus caught fire and he jumped out. Poor devil!

"Tried to keep his balance. I saw him going down with his arms spread out like a tightrope walker and his feet close together. He was turning slowly round like a top. I had to rudder hard over to avoid barging into him and got a close view of his face."

He stopped and walked unsteadily over to the window, whose square was already darkening with the approach of night.

"And then?" Sharpness prompted. "How did you and Flaherty manage to get back?"

"Luck, sir—nothing but luck," answered Hawkins, turning suddenly and facing his squadron commander. "Flight of Camels—Number Thirteen's, I think—came along just as we were almost scuppered and drove 'em off, but it was a close call, sir."

"And the decoy? What were its markings?"

"Usual British red, white and blue rings on the planes and vertical red, white and blue on the rudder. Nothing else, sir. No numbers or squadron markings."

"Sure of that, Hawkins? Quite sure? Think again. Nothing on top of the fuselage, for instance?"

Hawkins thought hard for a moment, then looked queerly at the little man standing before him.

"Good Lord, sir!" he gasped. "How did you know? Now you mention it, I believe there was a red star on the fuselage—about a foot wide."

Sharpness gave a satisfied nod.

"Thought so. Ran across him the other day, flying alone. Reported it to Wing by 'phone, as soon as I got back.

The Colonel said he'd investigate the absence of markings. Haven't heard anything since."

SHARPNESS turned to the litter on the table and ran his finger down a list of names.

"When did you go on leave last?" he demanded, looking keenly at the flight-commander. "The date doesn't appear here."

"Not been on leave since I came out, sir," Hawkins answered with a faint smile.

"Time you went, then. Getting stale. You'll push off at once and I'll tell Wing you've gone."

Hawkins reddened. "Thanks, sir, but I'd rather not."

"Rot. You'll do as you're told."

"Give me another week, sir, then I'll go," pleaded Hawkins. "I'm not stale, sir; really I'm not."

"D'you mean to tell me you don't want leave?" demanded Sharpness incredulously. "Dammit man; never heard of such a thing. Off you go."

"You don't understand, sir," repeated Hawkins firmly. "I'd like the leave all right, but can't you see, sir, I can't go just now—not after what's happened this afternoon?"

"Why not?"

Hawkins looked his surprise. "I'm not yellow, sir," he announced quietly, "and I'm hanged if I'll let the Squadron think I am. If I go on leave now, that's what it'll look like."

"Rubbish! They won't think anything of the kind. You go to-night and, understand, Captain Hawkins, this is not a request; it's an order."

Anthony Hawkins felt his face grow red with anger. What right, he asked himself, had this man to order him to take leave when he didn't want it? He was not in the least stale.

A sudden thought flashed into his mind. The decoy 'plane. He knew Sharpness liked to collect scalps single-handed. Didn't he go out every day for an hour or two, almost invariably alone? What if he had decided to add the decoy Spad to his string of victories? Nothing

was more likely. And that was why he had been ordered to go—to leave the coast clear for Sharpness.

However, an order was an order; doubly so when it came from Sharpness. At the moment, there seemed to be nothing for it but to obey. He snapped to attention and saluted.

"Very good, sir," he answered, and, turning on his heel, stalked out.

But, as he went towards his quarters, he had his own ideas as to how he would spend his leave.

CHAPTER II French Leave

THE following morning Anthony Hawkins was on his way to England in the front cockpit of an elderly B.E.2c whose period of usefulness at the Front was ended. Arriving at Lympne, bored but slightly anxious, the ferry pilot behind him handed over a buff slip to his passenger with a grim smile.

"I bet we both get it in the neck for this, but it's a stout effort on your part, Skipper, an' I wish you the best of luck," he said as they parted.

Soon afterwards, this same slip was exchanged for a new and gleaming Spad. Hawkins signed a receipt for it, and landed at St. Omer an hour or so later in the day.

He refuelled and, since the new 'plane was not to be collected by 76 Squadron until the afternoon, he decided to take a flip in the general direction of Villeron. The tanks would hold ample petrol and oil for the round trip and he would have no need to land there or anywhere else.

It was a bright, clear, late autumn day with a touch of frost in the air and a pale blue sky: one of those days on which one can see for a hundred miles.

As the Spad reeled off the aerial miles, its 150 h.p. engine drumming out its song of power, Hawkins noted the cloudlessness of the vault above him with disfavour.

"Not much chance of running across the blighter on a day like this," he grumbled. "Not a single blinkin' cloud for his clever friends to hide in. Still, it's a great day for a flip."

After climbing for about ten minutes his altimeter showed ten thousand feet and his pitot-tube a hundred-and-fifteen miles an hour. He closed the throttle a little and cruised along, looking carefully around him.

A couple of thousand feet below, a pair of lumbering Fees* with a scout escort were doing photography. He grinned at the complete nonchalance they displayed towards the "Archie" bursts which mushroomed unhealthily around them. So far as he could see, they deviated not a degree to left or right of their allotted line.

Sailing on, he noticed a squadron of big bombers flying west, evidently returning from a "strafe," but of enemy craft he saw very few. He saw nothing of the decoy. He hardly expected to. He passed over the aerodrome at Villeron, speculating happily on the lurid remarks Sharpness would make if he knew who was piloting the new Spad.

He made a wide circle and carried on due south, then turned north again a little later as a glance at the fuel gauge gave warning of a diminishing supply.

"Darn it!" he muttered. "Drawn blank. Well, it's been a nice airing. Maybe I'll be able to get away with it again to-morrow."

As he flew towards St. Omer, he edged towards the lines. Suddenly, for no apparent reason, he looked away to his left. A single 'plane was flying towards him about a thousand feet below. It was a Spad like his own, and promptly he ruddered towards it.

As he did so, he looked guardedly about him, especially above and behind. There was no other 'plane in sight, and he groaned aloud.

"No luck—no luck at all. Not a hope that it's him—not alone like that."

The strange 'plane was climbing to meet him and he waved a greeting. The other returned the salute and Hawkins veered off and continued on his way to St. Omer.

^{* &}quot;Fees": F.E.2b. 2-seater pusher biplane bombers fitted with 120 h.p. Beardmore engines.

Noticing the other pilot turning as if to accompany him, he wondered why. Then an idea flashed across his mind, and he opened his throttle wide and ruddered hard over, climbing steeply, and looking over the side as he did so.

An instant later, he ducked his head with a wild yell of triumph, and spun on a wing-tip.

"The Red Star!" he shouted. "I've got you cold, you blighter. What luck!"

HAWKINS swooped down with Hisso roaring all out. He saw the other 'plane waver for an instant as the pilot looked back. He saw his goggles glint for a second and realised the sun was in the other's eyes. Not a hundred yards separated the two 'planes.

Still diving with screaming wires, his thumbs tightened on the stick-triggers, and the 'plane vibrated suddenly as the twin Vickers blazed.

The tracers sped in a flattened arc towards the 'plane with the red star on its fuselage. Tracers and steel-jacketed lead, a mixture of one in five. Where the tracers smoked, there the bullets bit deep. One burst. Two. It was all over.

At that range and with the sun behind him, Hawkins knew he could not miss.

The Spad staggered in mid-air, then fell headlong, out of control.

Hawkins closed the throttle and followed it down.

"My God!" he shouted exultantly, "I've got him! Too easy. Like potting a sitting bird."

A sudden thought struck him and he stiffened in his seat. "Wonder if this is another trick," he muttered, looking anxiously about him. "No," he reassured himself. "Not a thing in sight."

He looked beneath him. The Spad was still dropping earthwards, but the pilot seemed to have regained some measure of control, for it was flying a little less erratically now.

At a thousand feet, Hawkins opened his throttle and circled warily a few hundred feet above the other.

The 'plane crashed into the shell-torn earth just behind the British trenches. Still circling, Hawkins saw it up-end and slowly turn over. The pilot struggled out and made for the shelter of the trenches. As he dropped in, shell after shell came over, ranging on the battered Spad until suddenly the petrol tank exploded and flames leaped skywards.

Casting an anxious glance at his petrol gauge Hawkins saw that the level was dangerously low. With a final glance at the flaming wreckage below, he opened the throttle, ruddered round on to his course and sped away northwards.

When he landed at St. Omer there was not enough petrol left to taxi to the sheds, and the perspiring and privately vituperative mechanics were obliged to push the 'plane for the last quarter of a mile.

CHAPTER III Victory Unconfirmed

AFTER five days leave in England, Captain Anthony Hawkins returned to Villeron, having divided his time between some half-dozen friends, moving here and there, never in one place for four-and-twenty-hours. He was therefore blissfully unaware that he had been closely pursued but never quite overtaken by urgent telegrams from the Air Ministry, each more peremptory than the last.

They overtook him en masse within an hour of his return to his squadron.

"Oh, Lord!" he muttered, as he opened a signal message handed him by an orderly as he was emptying his haversack on his bed. He felt suddenly weak about the knees.

"What's the matter, Skipper?" enquired "Slim" Mathers, looking up from a magazine.

Hawkins handed the missive over to his friend without a word.

Mathers read it aloud:

"Captain A. Hawkins. No. 301 Squadron R.A.F., Villeron. Your victory October 17th disallowed. The 'plane you claim to have brought down on map square 12-M-5 appears to have been piloted by Major Sharpness, commanding your squadron. Copy of your combat report claiming this victory has been

forwarded to this officer. Ack. Ack. Ack. (Signed) J. B. C. Langstroth, Capt. and Adj. For O. C. A. P. St. Omer."

"You know, Skipper," consoled the young Canadian pilot, as he handed the message back, "I never quite understood before why some guys commit suicide."

There came another knock at the door. Slim answered it after a glance at his friend who, with head in his hands, was past noticing such petty interruptions.

"More billy-doos," he commented cheerfully, as he held out half a dozen buff envelopes.

Hawkins looked at them without interest. "Open the dam' things yourself," he growled, and returned to his dismal thoughts.

Nothing loath, Slim did so. He gave a low whistle as he read the first one and a groan at the second, but after that the silence was unbroken save for the crackle of paper as he smoothed the messages out on his knee.

At last he sighed deeply.

"It's all right, buddy," he reported. "They'll probably shoot you at dawn. Don't reckon they can do more. You seem to have broken every rule the Air Ministry ever had while you were away. You didn't leave any address and they've been shootin' telegrams all over England by the look of 'em; all tellin' you to report to the Air Ministry pronto. Did you go?"

Hawkins shook his head wearily. "Hell, no. Never even knew they wanted me." He rose to his feet.

"Give me those papers. I'm going over to see the Old Man."

"What-now?"

"If I'm to be shot at dawn as you so kindly prophesy," he retorted, "I'd better go and arrange it now."

Slim Mathers looked at him and grinned.

"Good for you, Skipper. Take it on the chin while you're standing up. That's my motto. Better than a kick in the pants while you're lying down."

A minute later Hawkins' footsteps were receding in the distance.

TWO hours had passed, and the two friends stood chatting together beside Hawkins' Spad, which, with half-a-dozen others, stood bucking the chocks on the aerodrome while their engines warmed up.

"You mean to say," Slim was demanding incredulously, "that the Old Man

isn't having you fired?"

Hawkins grinned cheerfully. A great load had been lifted from his mind during his recent interview, an interview remarkably different from what he had anticipated.

"Not a bit of it. He was pretty huffy at first, but I managed to keep my end up. Finally, he admitted he would have done the same thing himself if he had seen a Spad with a red star on it."

"But what I don't understand," puzzled Slim, "is why he went up with

that star painted on his 'bus?"

"Told me that, too," answered Hawkins. "The beggar's got guts, all right. He thought that, if he used their decoy's markings, he'd be safe from attack by their 'planes and might have a 'chance of downing a few before they spotted his game.

"Said he'd snaffled five already that way and that it was only my butting in which prevented him from getting more. That's what he was so sore about. Didn't seem to mind much about getting

winged."

"You've got to hand it to the little

guy, all right," agreed Slim.

"You certainly have. Can't you just see him sailing into the middle of a Hun formation, getting the aerial equivalent of the glad hand from them, and then letting drive with everything he'd got?"

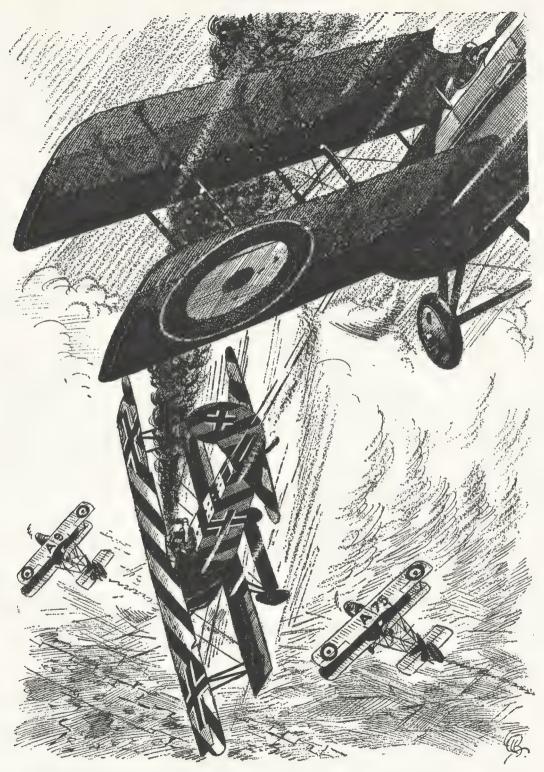
Slim nodded. "The little man's got what it takes, all right. You got to..." He broke off suddenly. "Here he comes. Guess I'll beat it. So long, Skipper."

But, as Hawkins climbed into his 'plane, he thought somewhat ruefully of the last part of the interview—a part which he had kept to himself.

"Well, sir," he had said, just as he was leaving the office, "I swear I'll get the blighter in the end."

Sharpness had looked up quickly.

DOUBLE DECOY



Before the striped 'plane could reach the Fees, Hawkins caught it in his ring-sight. . . . The pilot flung up his arms and the 'plane dived vertically with wide open throttle

"I have no use for a boaster," he had replied acidly. "Either you make that good or you can leave the squadron."

And Hawkins knew that he had meant just that.

CHAPTER IV Duel with a Dead Man

FIVE minutes later they were in the air, with Hawkins leading. They climbed leisurely to five thousand feet and cruised in a two mile circle, waiting for the brace of photographic Fees which they were to escort over the lines.

If there was one job which Hawkins hated above all others, it was this—flying up and down and back and forth, keeping his weather eye open for the enemy whilst the slower 'planes beneath them flew their unhurried courses, exposing plate after plate with exasperating slowness.

After ten minutes' waiting, the Fees arrived and carried on straight towards the lines. Hawkins fell in behind and above them, with the rest of his flight taking position to left and right in his rear.

For over an hour they flew back and forth, ever on the alert, but, although they saw a number of 'planes, both Allied and hostile, the patrol was uneventful.

It was true that at one spot they were heavily "Archied," but the Fees were evidently the object of aim, as few of the bursting shells reached the height at which the escort was flying.

Hawkins looked at the watch on his dashboard, and saw with no little pleasure that the estimated time was almost up. Soon the Fees would have finished and they could return.

He looked about him. A couple of miles away a solitary 'plane was flying parallel with him. He could see that it was a Spad. He watched it idly. Then he saw two Fokkers dive towards it, and the Spad writhed away. He sat up with a jerk. The old trick was being played again. Still he kept on his course, watching first the Fees flying below him and then the three machines, which were

now drifting towards them apparently by chance.

But, sorely tempted though he might be, Hawkins had two excellent reasons for staying where he was, and one of them was that he had caught a glimpse of something far above him—just a glimpse, it is true, but enough. An instant later, the shadowy Fokker Staffel had disappeared from view behind the clouds a couple of thousand feet above him.

The other reason was, quite simply, that his orders were to escort the Fees with their valuable photographs, and on no account whatever to be tempted away from them.

On this, Sharpness had been remarkably and tersely insistent, and as relations between him and his squadron commander were a trifle strained at the moment, Hawkins decided to stick very strictly to the business in hand.

He glanced at the watch on his dash. Time was up. He hoped the Fees had finished their job. Looking impatiently overside, he saw they were still ploughing their leisurely way back and forth. "Damn it!" he cursed. "Won't they ever get through? This is a hell of a game!"

A burst of tracers sizzled over his head. Instantly he sideslipped and looked behind him. Slim, at the right point of the Vee, was waving excitedly at him and pointing above.

Hawkins swore as he saw the Fokkers dropping upon them. The warning burst had evidently come from the Canadian, as the Huns were too far away to have been responsible for it.

"Well, we're going to get it, after all," he muttered. "Wish those darned Fees had finished."

WITHIN thirty seconds, the Fokkers were upon them, ripping and tearing at them with vicious stabs of flame. Hawkins' job was to keep them away from the Fees at all costs until they had completed their job.

He swung round in a ninety-degree bank, the rest of the flight hard on his tail. A striped 'plane flashed past him, and as it did so he opened fire. The burst went wide. Signalling the flight to open out, he sped after it. It was making straight for the Fees beneath him. But, before it reached them, Hawkins caught it in his ring sights, pressed twice and the second time saw the tracers drill the fuselage from rudderpost to cockpit. The pilot flung up his arms and fell forward on to the stick. The 'plane dived vertically with wide open throttle, as Hawkins veered away and zoomed to rejoin his flight.

He saw a Spad weave out of the mêlée, but could not tell whose it was. A Fokker burst into sudden flame and smoke, and fell headlong, passing close to him as he climbed. He flung into the battle with engine roaring and Vickers spitting venom.

A Fokker flew straight at him, prop to prop. He carried on with flaming guns, determined the other should give way. He knew that it was always the German who gave way in the end; it had always been so, and he banked on it happening now. But this pilot was different. He did not give way. Anthony clenched his teeth and held on. He must give way. They always did. He drove in another burst. Even as he did so he realised with a start why the other did not veer away. He was dead. He saw the hole neatly drilled between the eves, bare of goggles since the bullet had cut the elastic. There was no room to dive. He kicked on full rudder and climbed. The 'plane shuddered from boss to tail-skid, then fell steeply away.

Frantically, Hawkins pulled back on the unresponsive stick. What had happened? He glanced apprehensively over his shoulder, and his heart seemed suddenly to stop.

"My God!" he groaned. "The controls."

HE dived past the Fees with a roar. Their observers stared up at him with amazement that turned to sudden alarm as they caught sight of the fluttering fabric at the tail of his Spad.

"Well," he had time to think, "thank God they've finished their job."

Then he looked again at the needle of his airspeed indicator. It had reached the stop at the end of the graduated scale and was stuck there.

The ground was rushing up at him with terrifying speed and the altimeter needle was speeding backwards as he had never seen it move before. Instinctively his hand went out to switch off the engine. At least he would be spared from the horror of a flaming death.

He thought in a peculiarly detached manner, "This is the end for me. Worst hole I ever was in. Nothing on earth I can do."

There came a jolt which threw him against his straps as the wheels touched the ground, followed by another, a second later, as they buckled. His straps parted and he felt himself catapulted through the air. There was a terrific splash as a fountain of muddy water shot skywards, and at the same instant he landed on something yielding, but which, nevertheless, knocked all the breath from his body.

He was choking and felt very cold. He struggled weakly, gasping for breath, and found himself at the surface where he inhaled deeply the life-giving air.

Then he went under again. Again he struggled to the surface, and this time managed to find a hand-hold. It was solid but slippery, and he hung on with eyes closed, forcing the filthy water out of his lungs with great rasping coughs.

Slowly he opened his eyes and looked about him. He found he was in a gigantic shell-crater, almost filled with water on which a thick greenish-brown scum, now broken up by the violence of his descent, floated turgidly.

But he was alive. To his ears came the sound of bursting shells. "Poor old 'bus," he thought gloomily. "The blighters won't leave much of that."

One shell burst on the very lip of the crater, showering him with mud and debris, but he was unhurt save for bruises.

Darkness was falling, and never had he prayed for night as he did now. His teeth were chattering with the iciness of the water, but he dared not raise his head above the edge of the hole, for he knew the enemy would be on the look-out for him and he was not anxious to provide the target for a machine-gun.

And with darkness there might come a chance to escape.

CHAPTER V Death on the Highway

As the first star-shell flared aloft, to shed its hard white radiance over No Man's Land, and then died, leaving the war-torn terrain in even blacker darkness, Anthony Hawkins, half frozen and barely conscious, crawled painfully and stiffly from his refuge like some slime-covered saurian from a prehistoric age.

Slowly and laboriously he progressed, crawling round the endless and unnameable objects that bestrewed the devastated regions between the trenches. At last he heard voices away to his left. Whether they came from friend or enemy he could not decide, so he lay still in the mud waiting for the men to pass.

They did not pass, but came slowly towards him. Then two dark forms, black against the lesser darkness, loomed beside him. They bore something between them. One said something to the other in guttural German and, setting down their burden, they moved away.

Immediately Hawkins began to crawl towards the stretcher. There was a figure on it, the coal-scuttle helmet pressed on to the face.

Lifting it, he passed an exploratory hand over the features. He drew it away with a shudder. It was cold and clammy with the chill of death. But it was no time for squeamishness.

A couple of minutes later the stretcherbearers returned, lifted their load and trudged away, and nothing but a widening circle of concentric ripples on the scummy surface of a rain-filled shell-hole indicated that their burden was a changeling.

After a time there came a gruff, lowtoned challenge. The bearers halted and one replied. A light flashed for an instant and they moved forward again, their heavy boots echoing on boards flung across a support trench, boards which bent and swayed beneath their triple weight.

How far Hawkins was carried he did not know, but it seemed a long way, and he prayed that the dead man's helmet would not slip from his face with the jolting.

At last they halted.

"Now," said one, "both together—heave! Already the hole is almost full."

A second later, his hair rising on his scalp in sheer horror, Hawkins felt himself precipitated into the darkness, and it required all his strength of will not to cry out as he realised that he was being flung like so much carrion into a pit of dead men.

Then, as the bearers moved away grumbling, he got to his feet, shuddering at the ghastly contact with the yielding corpses, and climbed out of the shallow grave.

For hours, it seemed to him, he stumbled on, not knowing nor indeed greatly caring whither, his sense of self-preservation alone forcing him to take cover whenever he heard voices approaching. At length he crawled through a hedge, slithered into a muddy ditch and, climbing out of it, found himself standing in a country lane. Where it led he had not the faintest idea, so befogged was his brain with the endless stumblings to and fro in the pitch blackness.

For perhaps a minute he stood there, shoulders hunched, hands deep in clammy pockets, utterly miserable, frozen to the marrow by the chill wind which rustled amongst the leafless twigs of the hedgerow behind him.

"Dammit," he muttered between chattering teeth, "if I met a Hun now I'd damn well give myself up on the offchance of a spot of hot coffee."

Then he shrugged his shoulders and shuffled along the road regardless of direction, intent only on restoring some measure of circulation to his veins.

"'A Hun—a Hun," he misquoted, grinning tight-lipped, "'My Kingdom for a Hun.' Curse them all."

DOUBLE DECOY

HE had scarcely trudged a hundred yards when, breasting a rise, a blur of light came bobbing towards him and he heard the pop-pop of a motor-cycle exhaust—the engine revving fast.

"Thank heavens!" he muttered. "Here comes our friend the enemy. Now for it." And up went his hands above his head. But they dropped again, suddenly, as a thought struck him. Whipping out his automatic, he stood still in the middle of the road, and as the rider approached, he levelled it at the single headlight, almost blinded by its powerful beam.

The motor-cyclist, seeing his danger, switched off and swerved aside with a screech of brakes. Hawkins heard a bullet swish past his ear simultaneously with the bark of a heavy calibre revolver. Ducking instinctively, he side-stepped and squeezed the trigger. The motor-cycle brushed past him and, an instant later, the popping of the exhaust sounded once more as the rider switched on again.

Turning quickly, Hawkins raised his arm, but before his finger tightened on the trigger, the switch was cut again and the glare from the receding headlight wobbled crazily from side to side. There came a skidding crash, then silence.

"Winged him," Hawkins muttered, breaking into a shambling trot. "Wonder if the bike's done in."

When he reached him, the man was dead, a thin line of blood trickling from his mouth.

Hawkins pulled the machine to the side of the road, stripped the dead man of his clothes and put them on. Then he slid the corpse into the ditch and examined the machine. Apart from a bent footrest and slightly twisted handlebars, it seemed undamaged, and he whistled quietly and tunelessly as he examined the man's papers in the light of the head-lamp.

"Good," he muttered, and thanked Providence that his knowledge of German was at least adequate for him to understand that the despatches in his hand were addressed to the commanding officer of a German scout squadron. He could not read the message itself, which was obviously in code, nor could he gain any clue as to the whereabouts of the aerodrome, but he felt confident that he would come upon it if he kept on his present road.

Again on its way, whilst Hawkins, secure for the time being in his borrowed clothing, searched the countryside on either side of the road with anxious eyes, aided by the wide beam of the headlight.

At last, perhaps half an hour later, he found what he was looking for—a row of large dark buildings backing on to the road. He dared not stop for fear of attracting attention, so he carried on until he imagined he was out of earshot of the guard that would certainly have been posted. Then he switched off engine and light, pushed the machine into a little copse and returned on foot.

There was a sentry, all right. He could hear him pacing back and forth long before he saw him. He retraced his steps and approached the aerodrome from a distant corner.

Reconnoitring slowly and soundlessly, the buildings at length loomed up before him and he worked his way cautiously beneath the canvas curtains. It was a little warmer inside and he was grateful for the change. He sniffed the odour of burned oil, that mingled with the tang of petrol and the pear-drop aroma of doped fabric.

Moving forward silently in the darkness with hands outstretched, his fingers came in contact with the edge of a 'plane. In all, he counted six, and he could tell by their outlines that they were Fokkers. He sidled round the corner into the next shed. More Fokkers. He counted up to three and came to a fourth. Up and forward swept his exploring fingers, along engine cowling and prop.

Suddenly he stopped with a startled gasp. There was only one machine built like that.

"My God!" he muttered. "A Spad!"

For a few moments his tired brain failed to perceive the full value of his

discovery, then, as the significance of it came to him, he laughed noiselessly.

"By Jove, if this turns out to be the decoy 'bus, something's due to happen very shortly," he thought. "Wish Slim were here. He'd get no end of a kick out of it."

He climbed into the cockpit, endeavouring to trace the insignia with his finger but without success.

He had left his soaked and useless matches in his wet clothing, and there were none in those he now wore, but he had transferred his cigarette lighter with his other things, and the tiny spark was enough. At the third click he distinctly made out the tell-tale mark of the red star, and lowered himself to the ground completely satisfied.

CHAPTER VI Ordeal by Fire

ANTHONY HAWKINS seated himself on an empty petrol tin and thought things out. Plan after plan came into his mind, only to be discarded one after another as too complicated. Finally, the simplest of all appealed to him as the best, although it was none too certain, and he rose and busied himself exceedingly with handfuls of cotton waste which he formed into gigantic wicks, one end of which he stuffed into the opening of the petrol tank of every Fokker in the hangars, where they quickly became saturated.

The one thing that favoured his plan was that the decoy 'plane evidently had been pushed into the hangar last, and tail foremost. But for that he would have had to formulate some other plan.

When all was ready he glanced at his watch. He shook his head; it would be hours yet before it would be light enough to act, yet daylight would bring new hazards.

However, he knew it would be little short of suicidal to attempt to take off from an unknown aerodrome and find his way home in the blackness of a night as dark as this.

Therefore, he settled himself comfortably in the cockpit of the Spad and, despite the cold, fell asleep almost instantly.

And this was almost his undoing. Slowly but inexorably the seconds ticked themselves into minutes and the minutes multiplied themselves into hours, but still Hawkins slept on, stirring from time to time as his limbs became cramped and the chill crept into his bones. Suddenly he sneezed, a lusty sneeze, such as betokens the beginnings of a violent cold in the head; such a sneeze, indeed, that he banged his head on the cockpit and woke up.

For a moment or two he stared about him in the darkness, wondering where he was. Then he climbed down hurriedly from the cockpit as a faint sound came to his ears, the sound of marching feet—probably, he told himself, the early morning working party on its way to the hangars.

The sound came from the rear of the buildings, so there might yet be time, he thought, as, peering through the canvas curtain, he saw that the night was already greying into dawn.

Hastily he dragged the heavy curtains aside and ran back to the Spad. Pulling her over compression several times with open throttle, he switched on. Then, seizing the wad of petrol-soaked rags he had tied to a stick in readiness, he lit it and hurried from 'plane to 'plane, dabbing quickly at each inflammable wick.

They caught with a splutter and a roar, and as he threw away the torch and pulled over the Hisso engine, tongues of living flame were already leaping towards the roof.

Happily for him, the engine caught almost at once and he ducked under a wing and leapt for the cockpit. Slowly the little Spad moved forward, gathering speed under the impulse of the cold and treacherously missing engine.

The tail had scarcely left the shelter of the hangar when the foremost of the working party rounded the corner at the double. From the tail of his eye, Hawkins caught a glimpse of a man taking hurried aim at him with a revolver. He saw no more, but ducking low, jockeyed the

throttle lever while the Spad moved down the field, the engine vibrating as if it would shake itself loose from its bolts. Turning at the far end in a wide circle, he came back, tail up, wheels bouncing, while he juggled the stick and prayed she would leave the ground in time. Closer and closer came the sheds, a roaring mass of smoke and flame, against which were silhouetted puny black figures running to and fro like the inhabitants of a disrupted ant-heap.

At the last moment, Hawkins pulled back. The 'plane responded sluggishly as the cold raw petrol was sucked into the unwarmed cylinders, but she rose, staggering into the air like a gorged vulture, and the ground fell away beneath him.

As he turned westward and saw the smoke and flames away to his left, Hawkins blessed the Fates that his engine had not let him down. Not a single machine had escaped the inferno, and he was a little awestruck as he thought of the havoc he had so easily wrought.

He flew on, the cold forgotten in relief at his lucky escape.

Later, far ahead, he saw the smoke haze which hovered eternally above the trenches and as he approached, he recognised the locality. Not twenty miles ahead lay Villeron—Villeron and safety—and coming towards him was a flight of Camels.

He edged off slightly in their direction. As they met and passed him, going strong and still climbing, he waved his hand in greeting.

To his surprise, there was no response, and a moment later, he was fleeing for his life with those same Camels on his tail, firing furious bursts at him.

He was thunderstruck and more angry than he ever remembered being in his whole existence. What was the matter with this mad war, anyway, that he should get it in the neck from his own side?

Then he remembered—that cursed red star. They must have seen it as soon as they got above him and recognised the marking of the decoy Spad. Now they were after his blood.

He knew his machine was faster than theirs and opened his throttle and dived. For a while bullets continued to whine about him, then suddenly he smelt petrol. Looking down, he saw that the floor of the cockpit was wet and knew his fuel tank had been punctured. As if this were not enough, an instant later his engine vibrated as if it would cut loose, and he switched off with his prop. in splinters.

Just ahead were the British trenches. He lengthened his glide until the 'plane was almost stalling; he needed every forward yard he could coax out of the machine. In the end, he just scraped over, the tin-hatted infantry ducking instinctively as he slid above them.

He bumped over the hummocked, shell-torn waste and collided with a twisted iron stake. The Spad up-ended and he found himself hanging by his belt. Jerking out the pin, he landed on hands and knees. Turning, he ripped at the fabric behind him, then sprinted as fast as he could for the shelter of the British trenches, just as the first shell ranged near his crashed machine.

SOME two hours later Anthony Hawkins limped into the mess at Villeron. He was very tired, very cold and very hungry. A babel of welcoming voices assailed him.

Slim Mathers leaped towards him and pummelled him vigorously on the back.

"How the heck did you make it?" he demanded gleefully. "I could've sworn you were a goner when the Hun crashed into you."

Hawkins waved him away. "'Nother time," he mumbled. "Tell you another time. For God's sake give me a Scotch—several Scotches."

"Drinks all round!" yelled Slim at the mess orderly, who disappeared with speed.

"An' give me something to eat—lots of it," added Anthony. "Haven't had a bite for ages."

They crowded round, chaffing him affectionately.

"That's all right, Skipper," put in Slim, patting him on the shoulder. "You'll be as fit as a flea in a minute. An' get a load of this. Thirteen Squadron," he paused dramatically, "have brought down the Red Star. Whaddyer think of that, eh?"

Hawkins looked up with a surprising lack of interest.

"Camels!" he exclaimed bitterly, and that was all.

The door opened and Major Sharpness entered.

Hawkins rose slowly to his feet and moved towards him, haggard eyes staring from a mud-smeared and unshaven face. He was tugging at something in his pocket.

"So you got back, eh?" greeted Sharpness curtly. "How did you happen to collide with that Hun in the air?"

"Aw, heck," breathed Slim, sourly. "Why bring that up?"

Captain Hawkins stood there, swaying slightly. The mess orderly, arriving with glasses, backed silently out again to await a more auspicious occasion.

"Remember what I said yesterday?" continued Sharpness, disregarding the

muttered interruption. "Thirteen Squadron downed the decoy Spad a couple of hours ago. That's all."

He turned on his heel and walked towards the door in a silence as brittle as glass, a silence that was shattered very suddenly.

"I'm damned if that's all, sir," said Anthony Hawkins, very loudly and very angrily.

Sharpness stopped and turned, facing him from the doorway.

Gone was the weary stoop from the flight-commander's shoulders; gone, too the fatigue from his stern voice.

"That's not all—not by a long shot. I snaffled him, myself."

Sharpness raised his eyebrows questioningly; almost the only sign of animation his grim face ever showed.

"Your proof?"

Hawkins dragged something from his pocket, smoothed it out and sent it skimming across the mess-room table.

It fell upon the floor—a ragged square of aero fabric with a red-painted star on it.

And even Slim Mathers, for the first time in his life, was speechless.

HERE'S THE ANSWER

More Replies to Readers' Enquiries

GUYNEMER'S DEATH (D. C. Hodgkinson, Greymouth, New Zealand). The truth about Guynemer's death has never been established. All that is definitely known is that he took-off on his last flight on September 11th, 1917, and never returned. Some time later it was reported that a German pilot named Wisseman had claimed to have shot him down, but the report was never substantiated, nor was Guynemer's burial place ever traced.

OBSERVERS' SCORES (John Horne, Edinburgh, 12). (I) Official records are not sufficiently complete to give accurate scores for observers, but the following R.F.C. observers must certainly rank high in the list: Second Lieutenant H. Rhodes, 12 E.A.; Lieutenant A. J. Morgan, 11; and Sergeant R. M. Fletcher, 7. (2) Richthofen's circus was made up of Staffels 4, 6, 10 and 11, and, at full strength, comprised fifty-six machines. Types of machines used at various times were: Albatros Types D.3, 5, 5a and 6, and Fokker Types D.R.1, D.7 and D.8. In addition, Staffel 4 had two Roland D.6's, while several L.V.G.

and L.F.G. two-seaters were used for "leave" flights and communication work.

D.H.4 COLOURING (R. P. Trebell, Brockley, S.E.4). D.H.4's were painted with wartime dope varying in hue between dull khaki and dark green. Those used in Mesopotamia were light khaki. Undersurfaces were cream coloured, struts varnished spruce, engine cowling grey as far aft as the gunner's cockpit, and the radiator shutters were usually painted to suit the pilot's or squadroncommander's fancy. The engine was either a Rolls-Royce Eagle or the 240-h.p. B.H.P. six-inline.

FLY YOURSELF HIRE (J. G. Grist, Buckhurst Hill, Essex). (1) There are several concerns in England specialising in hiring out light aeroplanes to private pilots. These machines can be hired for any period from an hour to a month, and charges are inclusive of insurance, but exclusive of petrol and oil used. (2) A private pilot's "A" licence allows him to carry as many passengers as he likes—or as can be found to trust him!—provided that he accepts no remuneration from them.

CAP BADGE (W. S. Tarrant, Town Hall Chambers, Uckfield, Sussex). Sorry, we know of no source from which you could obtain a German Imperial Air Service cap badge with which to complete your collection, but if any reader can help he will doubtless write you direct.



'N a recent issue Mr. Arthur Pagden of Plymouth asked for verification of an Lextraordinary Great War incident in which an R.F.C. officer was reported to have fallen out of his machine in mid-air -and fallen in again a few seconds later. Several readers have since written to confirm this happening, and though they are not all in agreement as to the type of aircraft concerned or the squadron to which it belonged, they are unanimous in naming Captain J. H. Hedley, R.F.C., as the hero of what must have been one of the most remarkable escapes on record.

We are indebted to Mr. S. H. Barnett of Wembley Park, Middlesex, for the following detailed account of the adventure:

"It happened to an officer-observer named Captain J. H. Hedley," our correspondent writes, "who now resides in Canada. Hedley's pilot, Lieutenant Makepeace, was also a Canadian, and the machine, I believe, was an R.E.S. The accident happened when Makepeace put the machine into a sudden dive and Hedley was shot out of his cockpit over the centre-section. Apparently the pilot never knew his observer had gone until, pulling out of his dive, he felt a bang on the tail. Looking round, he was amazed to see Hedley clinging on to the rear end of the fuselage and desperately trying to regain his cockpit.

"It is reported that Hedley fell 300 feet, though this is probably an exaggeration. Nevertheless, Hedley had the most amazing luck, for I happen to know that, although he was pounced upon and shot down by Richthofen two days later, he survived an epic crash to finish the war as 'gefangener'—in a German prison camp."

Another correspondent, Mr. John Coltman of Loughborough, confirms the names of the pilot and the observer, but gives the machine as a Bristol Fighter instead of an R.E.8.

"The incident took place in 1918," he writes, " and the following is a copy of the report

'January 6th, 1918. Machine No. 7255 (Bristol Fighter). Height 15,000 feet. Lieutenant Makepeace reports Captain J. H. Hedley thrown into air during sudden dive in combat. Afterwards alighted on tail of same machine. Rescued."
"The squadron concerned," Mr. Coltman adds,

"was No. 20, R.F.C., which went to France in January, 1916, equipped with F.E.2d pushers which were replaced by Bristol Fighters in September, 1917. It had one V.C. on its roll, Sergeant T. Mottershead, and McCudden served with it for a while during 1917."

And now perhaps Captain J. H. Hedley, if he reads these lines in Canada, will complete the story by writing to let us know exactly what he said to his pilot when they landed !

What is a "Trichord"?

A SOUTH African reader, Mr. G. P. Holdsworth of Johannesburg, seeks the help of our readers in elucidating the mystery of the "Trichords" which were reputedly used by the R.N.A.S. during the war.

"I have been reading a book by Boyd Cable called 'Air Men o' War'," he writes, "and in it the author mentions a 'plane which he calls a 'Trichord.' It seems that these 'planes were used by the Naval Squadrons and had superior climbing powers to those of the German Air Force.

"I wonder if any of your readers could supply me with some information regarding these 'Trichords,' as though I have read quite a few air-war stories, I have never before come across a machine

of that name."

We have seen the term used by several writers of air-war fiction, but as, so far as we know, there was no Allied aircraft with this type name, we have always assumed that the writer was referring to the Sopwith Triplane, a large number of which were used by the R.N.A.S. Perhaps some ex-R.N.A.S. reader can tell us whether "Trichord" was ever used in the R.N.A.S. as a nickname for the Triplane?

A War Bird Remembers

READERS of our recent articles on Aircraft Armament will be interested in the following reminiscences of a former "war bird," Mr. Walter Steel, of Oldham, Lancs., who writes :

"As an ex-Flight Sergeant and Chief Mechanic of the R.F.C. during the Great War, I am a very interested reader of AIR STORIES. The article 'Sky Guns of To-day' was of particular interest to me, as it recalled memories of when I was serving in France in 1915 with No. 18 Squadron, R.F.C., under the command of Major Carmichael, D.S.O.

"At that time, rifles and revolvers were the R.F.C. armament, though, soon after, we received about three Lewis machine-guns, which needed a mounting of some sort to fit them on the machines. Our C.O. at once dug out all the engineers and soon we were all busy designing and making mountings

of various kinds to suit the guns.
"Incidentally, the Norman Vane Sight mentioned in your article was designed by my workshop officer, Lieutenant Norman, and made and re-made until perfect by our workshop staff, which com-prised Lieutenant Norman, Corporal H. Hornsley and myself. I still have some of the original drawings.

"If any of my former comrades in 18 Squadron are readers of the AIR STORIES and see this letter. I'd like them to know I still remember them and

wish them all the best of luck.'

We are most grateful to our correspondent for this interesting account of the evolution of the Norman vane gunsight, and should like to offer him, on behalf of AIR STORIES' readers, our belated congratulations on the part he played in developing an armament invention of such value that, after more than twenty years, it is still widely used in the R.A.F. to-day.

Things to Come

AMONG a number of pleasant surprises in store for AIR STORIES' readers in the course of the next few issues are three grand long air-war adventures by those popular authors, Wilfrid Tremellen, G. M. Bowman and H. C. Parsons. Each one, in our opinion, is easily the best that these brilliant writers have yet produced -and to those who remember such stories as "Bridegroom of Death," "Order of the Bath" and "North Sea Patrol." this should be recommendation indeed. Our "unofficial historian." Mr. A. H. Pritchard, also has nearly completed a great new air-war feature of outstanding interest. Much research has gone to its preparation, and it will be a worthy successor to his previous outstanding successes, "Wings of the Black Eagle " and "Falcons of France."

Another important event will be the early return to these pages—in response to numerous requests from his admirers of that unique character, Major Montgomery de Courcy Montmorency Hardcastle, M.C., better known, perhaps, as plain "Monty."

A Double-sized "AIR STORIES"?

AND now, having mentioned what AIR STORIES is going to do for its readers in future issues, perhaps we may be permitted to suggest something that our readers could very usefully do for We are continually AIR STORIES? receiving requests for the inclusion of new features, for more space to be devoted to models, for more air-war stories and, particularly, for more frequent publication of the magazine. We are ready and eager to give effect to all these suggestions, but-and here's the snag-increases in the size or frequency of a magazine can only be made in proportion to an increase in the magazine's number of readers. In other words, if each present reader of the magazine could, by recommending it to his friends, enlist one new reader, we could almost double the size of the magazine forthwith, as well as making many other improvements.

We are offering no Coronation mugs, tea services or Hawker Hurricanes as prizes for those who interest new readers in the magazine, because we feel that they will find in the enlarged and improved magazine the best reward for their kind help. We should, however, like to hear from every reader who succeeds in obtaining a new recruit to AIR STORIES and every such letter will be acknowledged.

So now what about that new reader and a double-sized AIR STORIES?





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